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ABSTRACT

This report outlines a program through which a State Employment Service, using existing resources, can provide employers and their workers with a broad range of technical services in order to improve productivity and make work more tolerable. The report is based on observations and analysis by a team of participant-observers of a Skill Improvement Systems program operated by the Ohio Bureau of Employment Services. The program, originally limited to upgrading, evolved into a broadly based program directed toward improving personnel procedures, training approaches, and other manpower management practices of private companies and government agencies. Sections of this report contain: (1) observations, policy implications, and suggestions for Department of Labor policy makers and program planners in ameliorating the problems of the employed worker, (2) a description of the Ohio project, including a preliminary assessment of outcomes, and (3) a manual of the steps required to plan, implement, and operate a broad employer technical services program. (Author/SB)

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MANPOWER SERVICES
In The
WORKPLACE

An Employer Technical Services Program
For A State Employment Service

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by

E.F. SHELLEY AND COMPANY, INC.

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with the assistance of Meta N. Rasnow

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MANPOWER SERVICES IN THE WORKPLACE

AN EMPLOYER TECHNICAL SERVICES PROGRAM FOR A STATE EMPLOYMENT SERVICE

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This report outlines a program through which a State Employment Service, using existing resources, can provide employers and their workers with a broad range of technical services in order to improve productivity and make work more tolerable. The report is based on observations and analysis by a team of participant-observers of an MDTA funded project operated by the Ohio Bureau of Employment Services. The project, originally limited to upgrading, evolved into a broadly based program directed toward improving personnel procedures, training approaches and other manpower management practices of private companies and govt. agencies. The report contains 3 sections. Section I: Observations, policy implications and suggestions for DOL on serving employed workers. Section II: A description of the Ohio project, including a preliminary assessment of outcomes. Section III: a manual of the steps required to plan, implement and operate this type of program.

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FOREWORD

This report was prepared by the staff of E.F. Shelley and Company, Inc. under contract with the U.S. Department of Labor, Manpower Administration. The authors wish to acknowledge the invaluable contribution made by Ms. Meta Rasnow during the initial research, subsequent field work and the preparation of the final draft. Also, we wish to thank Ms. Ruth Spitz for her able assistance in editing the report.

We are grateful for the generous support and cooperation we received during the past 18 months from the officials of the Ohio Bureau of Employment Services: Administrator William E. Garnes, Deputy Administrator Irvin G. Lowery and Special Assistant Modelle Clausen. And we particularly wish to express our appreciation to the staff members of Skill Improvement Systems and Industrial Training Services, and to the Program Directors, Phyllis Payne and Joe Unger of SIS and Mort Harvey of ITS, for their openness, assistance and guidance in preparing this document. We hope that the descriptions and procedures provided in the report are reflective of the quality and innovative nature of the activities of those two projects.

Providing manpower services to the employed worker is a relatively new activity for government. The approach advocated in this document represents the developmental stage of a program to serve workers through their employers. We believe that significantly more attention should be given to the issue of serving the employed worker and offer in this document one possible programmatic response. We believe that the benefits to be derived from an Employer Technical Services program will accrue not only to the worker and his employer but to the State Employment Service providing the service.

February, 1973

Arthur W. Kirsch
Ann L. McLeod

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SECTION I — OVERVIEW

OVERVIEW

This report outlines a program through which a State Employment Service, using existing resources, can provide employers and their workers with a broad range of technical services in order to improve productivity and make work more tolerable. The materials presented in this document are based upon observation and analysis of a State Employment Service operated project originally designed to accelerate the upward mobility of poorly paid, low-skilled workers. During the past 18 months, an E.F. Shelley and Company project team has worked with Skill Improvement Systems (SIS) in Columbus, Ohio, an MDTA funded project operated by the Ohio Bureau of Employment Services. While the initial design of the SIS project had relatively limited goals restricted to upgrading, it has evolved into a broadly based program directed toward improving personnel procedures, training approaches and other manpower management practices of private companies and governmental agencies.

The most significant observations of the study are contained in this first section and follow immediately below. These points are linked, by a discussion of the implications of experimental upgrading programs, to a brief list of suggestions for the Department of Labor concerning possible mechanisms for providing services to employed workers.

The body of this report begins with Section II, a description of the SIS project development, including a preliminary assessment of program outcomes. Section III contains a technical presentation of the steps required to plan, implement and operate an Employer Technical Services program in a State Employment Service.

OBSERVATIONS

The following observations concerning the provision of manpower services in the workplace stem from our experiences in Ohio and almost three years of research and reflection in the upgrading field.

- The term *upgrading* and the limited approach it has come to describe (increase in pay, change in title) cannot serve as a programmatic response to the significant problems of the typical employed worker.
- Many personnel practices, training procedures and work rules are instituted in response to immediate need and too often are not the result of a rational plan designed to assist the company in achieving its goals. Organizations frequently have neither the time, resources nor inclination to reevaluate these procedures.
- Innovative managers are becoming aware of the limitations of mechanistic responses designed to increase productivity, such as tightening of work rules or automation. There is a dim but growing realization among production oriented managers that the workforce must be treated as human beings rather than merely a means of production.
- Recent legislation and litigation affecting the relationship between employers and their workers has forced companies to examine and substantially modify their manpower management systems.
- Employers are receptive to and appreciative of analytical and technical services that can identify and rectify problems in their firms' manpower management systems.
- Because of the difficulty in intervening in the personnel process of an organization, the provision of in-plant problem analysis and services by an outside agency is best approached in a flexible manner. This intervention may require not only the offer of monetary incentives but technical assistance in the planning and initial operation of special in-plant programs.

- Many of the analytical and training skills necessary for in-plant service programs currently exist in community-based manpower agencies which have both the mandate and resources necessary to assist employers in developing their workforces.

- A State Employment Service, drawing upon present capabilities, with only minor modifications to existing salary structures, and supported by a strong staff training program, can mount an effective in-plant problem analysis and manpower services program as part of a comprehensive employer technical services effort.

- Although a definitive evaluation has yet to be undertaken, in-plant problem analysis and technical services provided by a State Employment Service appear to have a positive effect on employers' image of the Employment Service, and on employee productivity, morale and motivation.

- There appears to be little interest on the part of federal Employment Service officials in substantially increasing resources and staffing for the expansion of program areas not directly related to the placement function. The concept of an employer technical services program is received more favorably by state officials, but their ability to react programmatically seems restricted by recent budget limitations.

IMPLICATIONS

With little exception the major focus of the publicly supported manpower program has been the problems of the unemployed. Prior to the 1960's this concern centered on lessening the financial impact of unemployment and reducing frictional unemployment through the Unemployment Insurance and the Employment Service systems. During the past 10 years this focus has been broadened, and significant resources have been made available to help particular groups -- those disadvantaged because of poverty, lack of education or training, those blocked from certain jobs because of racial prejudice -- who might be considered structurally unemployed. In the late 1960's it became apparent that skill shortages, social pressures and particularly the need to keep recently hired disadvantaged workers on the job might necessitate additional attention to the needs of the employed. These factors, coupled with a growing realization that traditional work values were being questioned by younger workers, encouraged manpower planners to begin experimenting with techniques for bringing manpower services to the employed, particularly poorly paid, low-skilled minority group workers.

Under the banner of upgrading, an ill-defined concept at best, traditional industrial engineering and human resource development techniques were modified and applied in varying contexts. The expectation was that through these efforts entry level employees might be moved to positions of greater skill, responsibility and remuneration, thereby opening entry level jobs to the unemployed. Varying mixtures of training, task analysis, job restructuring and problem analysis were tried both within and outside the worksite. The first research and demonstration programs emphasized training supported by limited job restructuring and had as their goal a single step upgrade with an increase in pay. When it was obvious that this approach was too limited to be widely effective, the scope was broadened to attempt substantial change in existing career patterns, personnel procedures and training practices.

What has emerged from this experimentation is the realization that the acceleration of upward progression within an internal labor market presents a complex, multi-faceted problem. In the first place, management presently sees little need for changing personnel or promotional practices, except when pressured by equal employment opportunity compliance agencies or critical skill needs. Secondly, many American workers, particularly those who are poorly paid, are employed in industries with compressed occupational structures which provide limited opportunity for meaningful upgrading. Finally, with the exception of small factions of black and female employees, the majority of less-skilled workers are not presently articulating demands for upgrading opportunities, and this serves to further solidify management's negative attitude toward change.

There is little doubt in our minds that the term upgrading and the limited concept it represented originally has outlived its usefulness. Upgrading should have continued to be considered a theoretical construct which was artificially separated from the manpower process in order to facilitate experimentation with various training and analytical techniques. The move to establish upgrading as a discrete and valid programmatic area was perhaps premature, tending to put undue pressure on demonstration program designers to come up with replicable models before all the problems had been fully identified and solved.

The techniques that evolved from the R&D upgrading programs (training, occupational and job task analysis, and in-plant problem identification procedures) are, for the most part, recastings of traditional industrial engineering and personnel management approaches, modified to produce the specified outcomes of an upgrading project. Experience in applying these techniques in a variety of industrial situations has indicated that at least in terms of the more limited goals of upgrading -- an increase in salary, skills and responsibilities -- the benefit to the worker was attributable more to the nature of a company's occupational structure than to the quality of the service. In those companies with rich occupational structures, the application of these techniques has resulted in the identification and removal of blockages to advancement through training, counselling or restructuring. For companies with compressed occupational structures, outcomes of the application of these techniques were too often cosmetic rather than substantive.

The experimental upgrading programs met with substantial resistance in marketing, despite offers of significant incentives. Management officials apparently had difficulty in separating upgrading from the company's total manpower process, and while they were able to identify a wide range of manpower related problems, they did not feel upgrading was the appropriate response in most cases. Despite the fact that employers were not receptive to the upgrading concept, they were able to see that some of their firms' manpower problems might be ameliorated by a flexible application of "upgrading techniques." Since employers wanted this kind of help, they were often willing to agree to "token" upgrading (change in title, minimal raise in pay) in order to be able to take advantage of the services of upgrading demonstration programs.

In our report on innovative upgrading approaches,* we recognized the limitations of one-step upgrading programs and advocated a more comprehensive approach designed to encourage the creation of an "upgrading environment." Although the concepts presented were valid, our reluctance to drop the term "upgrading" tended to obscure the thrust of our position -- the need to develop a broad approach to improving company manpower management systems.

We are suggesting now that manpower program planners give additional attention to the manpower service needs of the employed worker. On first thought it may appear that this attention is highly misplaced during this period of high unemployment and that resources should be focused on the reduction of frictional unemployment. However, there may be no conflict between these two issues. By making the workplace more tolerable and improving the productive capabilities of workers and their supervisors, the likelihood of both voluntary and involuntary turnover is substantially reduced.

The technological revolution of the past 30 years has resulted in an explosion of new occupations and career structures. Computer and communications technologies, advances in air transportation and the recent application of engineering skills to the medical service field have resulted in a rich expansion of the economy's occupational structure. Along with this increase in the variety of skills and the attendent tendency toward specialization has been the apparent erosion of the durability of skills acquired at the beginning of a person's working life. The Nation's economy should not have to absorb the losses resulting from the unemployment of highly trained workers, structurally unemployed because of technological improvements, changes in public tastes, shifts in national priorities, foreign competition and more recently, environmental and social pressures. All of this suggests that perhaps we must seek to apply programmatic remedies before the crisis of unemployment occurs.

Our examination of programs providing services to employed workers has indicated that there may be potential in applying resources to keep workers on the job and encouraging their continued career development. The particular project studied and described in the following section of this report offers one approach to serving the worker -- providing the services to him through his employer. The advantage of this approach is that the services provided are relevant to the present needs of the worker, his employer and the economy, and the benefits are usually identifiable (although not necessarily measurable) and immediate. However, because this approach requires the intervention of an outside organization in the workings of an internal labor market system, some thought must be given to its practicality as a broad, publicly supported program.

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* Kirsch, Arthur W. and Donald D. Cooke, *Upgrading the Workforce: Problems and Possibilities*, New York: E. F. Shelley and Company, Inc., 1971.

The process of non-regulatory in-plant intervention by a governmental agency is both complex and sensitive. While corporate officials willingly accept the assistance of private management consultants, there is considerable resistance to allowing government representatives access to company facilities, personnel data and employees. In addition, the experience of the SIS program and a similar project, Industrial Training Services, operated by the New Jersey Department of Labor and Industry, has indicated that the level of effort needed for even the simplest in-plant program can require a considerable investment in State Employment Service staff time and financial resources. Although it is too early to undertake a definitive evaluation of these two programs, there is some reason to believe that traditional cost-benefit analysis might cast doubt on the efficacy of a policy decision to expand the program to other jurisdictions. Finally, there is still the question of whether government ought to take an active role in the inner workings of privately owned organizations. The National Manpower Advisory Committee has already cautioned the Manpower Administration to proceed slowly in further experimentation with in-plant intervention. Department of Labor officials, foreseeing that such programs will probably fall within the purview of the Employment Service system,are concerned about adding still another function to that already overburdened institution. Underlying both those issues is the uneasy feeling that government is already too involved in in-plant matters through its regulatory functions and that another inroad can serve only to lessen the vitality of the private sector.

Despite these considerations, the experiences of the two technical service programs mentioned above suggest that there is an appropriate role for government in this area. Employers, after some admitted hesitency, have opened their records and facilities to the staff of these projects and have accepted and acted on the suggestions resulting from in-plant problem analysis. The benefits which have accrued to the employer, his employees and the agencies themselves, although not completely measurable in a quantifiable sense are identifiable and do seem to justify continued experimentation in this area. In addition, there is some indication that companies might be willing to underwrite at least a portion of the cost in those situations where program expenses are unusually high. The question of whether the federal government ought to provide such services to the private sector goes beyond the scope of this discussion. However, there is significant precedent for this approach both in the Agricultural Extension Service Program of the Department of Agriculture and some of the technical assistance efforts of the Commerce Department's Small Business Administration. Certainly the two Employment Service programs have indicated that there is a class of small to medium-sized organizations whose workers can substantially benefit from the provision of manpower services.

We suggest that the United States Employment Service expand the experimentation begun in Newark and Columbus by continuing to support those two programs and by underwriting the development of up to five additional Employer Technical Services programs. Since much of the capability for this type of program exists within the state agencies, the level of federal support should be restricted to planning funds and initial technical assistance. Appropriate states should be surveyed to determine whether there is significant interest. Once the pilot programs are established and have as much as three years of operational experience, a detailed evaluation of the approach should be undertaken before extending the effort to a national program.

Other options for assisting the employed worker might be the provision of assessment, counselling and training services outside the workplace. The recent interest in career guidance may improve a worker's initial career decision; however, because of economic and technological changes, a typical worker may have to change his career and broaden his skills several times during his working life. If prolonged periods of unemployment during these job changes are to be avoided, career counselling must be expanded to reach workers at appropriate points throughout their careers. Several modest experimental efforts along these lines are already underway. The Labor Education Advancement Program, operated by Rutgers University and with the assistance of the Joint Labor Council of Middlesex County (N.J.) uses co-worker counselors to heighten worker interest in self-improvement. Also, there have been several demonstration efforts designed to provide training and educational services to employed workers. For example, the Syracuse local office of the New York State Employment Service marketed a program that offered specific skills training to employed workers in the area. Working with the local MDTA Skills Center, they were able to develop and deliver skills training to employed workers who participated on their own time, with no remuneration or promise of promotion. Although the demonstration phase was completed several years ago, area companies are continuing to refer employees to the Skills Center, which has substantially broadened its training capability. Another experiment, the Job Advancement Training Program in Antioch, California, is investigating the problems and potentials of using layoff time periods to provide training and counselling services to workers. Several suggestions for innovative use of the Unemployment Insurance system have been generated through this effort.

Underlying these experiments has been an interest, throughout the public manpower and educational establishments, in several European programs for worker training and development. Legislation in West Germany, Sweden and France has authorized subsidies for workers wishing to participate in full-time training or educational programs, as long as the skill development serves a present or future economic need.

Institutions capable of supplying training and counselling to those ambitious and farsighted workers concerned about career development are presently available in most major population centers. Unfortunately, many industrial workers are either unable or unwilling to take advantage of these services. The pressures of work, transportation problems, and the responsibilities of family appear to present insurmountable obstacles to many workers, inhibiting their participation in further training and development. At a recent meeting of the National Manpower Advisory Committee, one Manpower Administration official said: "New programs to stimulate and aid worker participation in education and training programs for both skill and personal development might add a valuable new dimension to worklife and improve the capabilities and flexibility of the employed workforce."* All of these rather modest experimental programs were designed to investigate the potentials of broadening services to the employed worker. They represent the beginning of what can be an exciting and productive effort to make the work experience more satisfying and to design a comprehensive manpower development system that will result in a more adaptable and productive workforce.

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* Brandwein, Seymour, "Upgrading: Program Experience and Policy Considerations," A paper presented at the 31st meeting of the National Manpower Advisory Committee, Washington, D.C., September 17, 1971, mimeographed.

SUGGESTIONS

While this project was not intended to assess the potentials of present upgrading approaches nor to ruminate on future directions, we offer the following broad suggestions for consideration by Department of Labor policy makers and program planners interested in ameliorating the problems of the employed worker. It is suggested that:

- State Employment Service agencies be encouraged to review the material presented in this report along with the activities of the Ohio and New Jersey projects, in order to extract those experiences which might serve to enrich their employer services programs as well as meet the manpower service needs of employers and workers.

- The Department of Labor Office of Research and Development give increased attention to the identification of manpower service needs of employed workers and consider the potentials of developing service packages and delivery systems to meet those needs.

- The Department of Labor consider the establishment of locally-based technical assistance and/or information and referral service programs designed to assist firms in complying with existing and proposed legislation affecting the relationship between employers and their workers.

- The Department of Labor develop closer links with national, state, and local equal employment opportunity compliance agencies which have created considerable impetus for change in company personnel practices and training procedures. The Department could substantially improve its image in the employer community by providing the analysis and technical services often required in eliminating discriminatory practices.

- The Department of Labor investigate the feasibility of developing an information retrieval system to collect, classify and disseminate descriptions of company-initiated efforts designed to improve the work environment, make manpower management practices more effective and increase productivity.

- The Department of Labor Office of Research and Demonstration consider mounting programs designed to encourage presently employed workers to continue their career development through participating in educational and training activities.

- The Employment Service be encouraged to provide career counselling and, if appropriate, placement services to employed workers to make them aware of the consequences of present career decisions and better prepare them to respond to shifts in labor market needs.

SECTION II — THE SKILL IMPROVEMENT SYSTEMS PROGRAM

THE SKILL IMPROVEMENT SYSTEMS PROGRAM

The material presented in this section describes the growth of the Skill Improvement Systems (SIS) Project of the Ohio Bureau of Employment Services from a limited, one-step upgrading approach to a broad employer-technical services program.

This description of the SIS development process is based on the perceptions of a team of participant-observers and on data collected during the first 15 months of project operations. The decisions and programmatic situations described below reflect the responses of OBES to operational problems, within the context of Bureau needs and administrative constraints. The material presented is intended neither as criticism of operating officials nor as a model for others to follow, but to communicate a sense of the planning and operational issues that may confront others attempting to establish an Employer Technical Services program.

SUMMARY OF THE SIS EXPERIENCE

Background

In June of 1971, the Ohio Bureau of Employment Services was funded by the United States Employment Service (USES) to operate an in-plant upgrading program. The decision to support this program was based in part on the success of the Newark Industrial Training Services (ITS) program * which has been operated for the past five years by the New Jersey Department of Labor and Industry as an outgrowth of the Department of Labor's High Intensity Training (HIT) experiment. ** The HIT upgrading approach, developed by Skill Achievement Institute, uses a consultant or in-plant intervention model which includes: an analysis of training needs; 40 hours of in-plant training stressing personal development as well as skills; a guarantee of trainee promotion with an eight to ten percent salary increase; and the training of a company official in certain specialized skills to enable him to continue the training efforts. Although it is possible for a company to use some of the HIT techniques without outside assistance, the package is basically designed for utilization by an external organization having the skills and stature to intervene in a company's internal processes. Because the Employment Service had some significant in-plant intervention experience through its Industrial Services program, it was felt that a State Employment Service might be an appropriate delivery mechanism for the HIT package.

The Newark ITS program began as a demonstration project designed to test the HIT package in an operational setting. But the project staff initially found little receptivity for the HIT model from employers who were unable to relate this rather inflexible upgrading approach to their perceived manpower needs.

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* For more information on ITS, see: Industrial Training Services, New Jersey Department of Labor and Industry, *The Employment Service Trains and Upgrades the Low Skill Worker*, Newark, New Jersey, 1970.

** For more information on the HIT approach, see: Skill Achievement Institute, *Upgrading the Underemployed in the Work Environment*, Lake Success, New York, 1969.

The services offered by the project were therefore broadened in order to respond to management's articulated training needs, despite the absence of immediate upgrading opportunities for the company's workers. This modification of the service model involved dropping the rigidities of the HIT approach -- the required letters of agreement, the 40 hours of training and increases in trainee salary -- in favor of a more flexible application of the High Intensity Training techniques coupled with traditional SES Industrial Services practices. Employer receptivity to this new service configuration has been unusually strong as demonstrated by the continuing presence of a six-month backlog of requests for service, even during periods of high unemployment in the Newark area.

A Broadened Approach to Employer Services

The apparent success of the ITS program in evoking the trust and respect of employers appealed to several officials in USES who saw in the Newark experience an approach that might serve to revitalize the near moribund Industrial Services program and enrich the SES employer contact process.

For the past several years the Employment Service system has become increasingly applicant oriented in response to the need for improving employment opportunities for the disadvantaged worker. Several USES officials have argued that the diminution of openings and placements experienced by all State Employment Services in the late 1960's and early 70's could be traced, in part, to employers' feelings that the Employment Service was not responding to their needs. The ITS experience suggested that a positive and aggressively offered service package providing assistance to employers in improving personnel management systems and in meeting company training needs might serve to improve the ES image in the business community. In so doing, an SES could evoke employer loyalty without substantially deflecting the focus of the placement process away from the needs of the disadvantaged applicant.

Replicating the Newark ITS Program

Although USES had circulated a plan* to include upgrading formally as a part of its total program, a decision was made to test the concept further by installing an ITS type program in at least one additional state. The Ohio Bureau of Employment Services, headquarted in Columbus, Ohio, was selected as a test site, and it was hoped that this experience would not only offer an opportunity to examine further the usefulness of the concept but would provide a laboratory to develop the requisite documentation as a guide for other states wishing to replicate the approach.

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* USTES, Office of Research and Development Task Force, "Upgrading through a National Pilot Program." Internal Paper, Washington, D.C., May 27, 1970 (Mimeographed).

A persistent problem in manpower research and experimentation has been that the documentation of many demonstration projects does not adequately report the particular problems confronted during the development process, nor does it describe the decision-making processes followed in attempting to resolve those difficulties.

The handbooks produced by demonstration projects are frequently limited documents failing to specify the rationale for using particular techniques, and devoid of alternative methods that might be applied in varying contexts. Understandably, project personnel are often so immersed in responding to daily operational demands and in developing new techniques that they have little time to reflect on the rationale for decisions made during program planning, development and operations.

Since the OBES project had the dual purpose of further testing the upgrading program concept in a State Employment Service and developing documentation for possible replication by other state agencies, it was decided to provide the Ohio Bureau with assistance in this documentation task. The services of E. F. Shelley and Company, whose staff had been actively involved in research in the upgrading field, were secured. Employing participant-observation methodology, the task of the Shelley Company was to collect and analyze information on program operations in order to document the decision-making process during the planning and implementation of the project.

OBES Proposal Development

The selection of OBES as the sponsor for this project, the development of the program design and the initial project implementation activities were the mixture of rational choice and happenstance that often characterize manpower demonstration activities. The proposal development process and initial program implementation had far from a smooth start, resulting from what seemed to be an unclear understanding by the overworked Bureau management of the goals and approaches of the proposed project. Because the DOL funding office responsible for the

OBES project was being restructured, federal officials were unable to provide significant assistance to the Bureau. This DOL administrative reshuffling involved numerous staff changes, bringing into decision-making positions a new group of Labor Department officials unfamiliar with the experimental work done in the upgrading field and with the background of the Ohio project. These personnel changes, coupled with an upswing in unemployment, resulted in an apparent loss of interest by DOL in upgrading as a program area.

Observations

The original OBES program design for the Skill Improvement Systems project was based substantially upon the HIT experience because that concept was readily comprehensible to the OBES proposal writers who had little background in the complexities of in-plant intervention. It is now clear that stronger federal guidance would have improved this development process and would have been welcomed by Bureau officials. Although the Shelley team attempted to facilitate the proposal development and project implementation process, they decided not to become too deeply involved in the effort for fear of losing their objectivity.

Despite its uneven start, SIS succeeded in developing a service model now widely received among Ohio Employers, and has also been able to build a small backlog of requests for service. Significantly, the service approach which began with a focus on upgrading has shifted, much like that of ITS in Newark, to broader responses to the manpower management problem of industry. This expansion is fortunate since preliminary analysis of the upgrading activities of both the SIS and ITS projects casts some doubt on the economic value of upgrading as a discrete program area for the Employment Service. While more than 172 of the 447 workers trained by SIS received salary increases ranging from 5% to 15%, many of these increases were too often more cosmetic than substantive. In many cases companies agreed to the increases because they wished to avail themselves of the SIS services and not solely because they felt training would make employees that much more valuable. However, as an outcome of SIS activities, there have been visable instances of improved morale and working conditions, which in turn have contributed to organizational efficiency.

Moveover, the value of the SIS and ITS approaches should not be assessed only in terms of worker pay and skill increases. SIS has had a significant impact on the quality of the employer contact program in OBES and has provided the Bureau with a benchmark with which to measure the effectiveness of its rather substantial Occupational Analysis and Industrial Services (OAIS) program. Among the corporate officials of the more than 14 companies served by SIS, there has been general agreement that the analytical and training services provided had significant impact on the effectiveness of the workforce and the efficiency of the organization. These employers have demonstrated the high esteem in which they hold the program by placing more than 200 job orders with OBES through the SIS staff and by requesting additional services from the program.

Whether the effectiveness of SIS can be measured in cost-benefit terms is unclear, and it is far too early to undertake such an evaluation. What does emerge from the 18 months of experience in Columbus and the nearly four years of work in Newark is that a typical State Employment Service staff, armed with available manpower analysis and service techniques, can professionally modify company personnel and training procedures resulting in improved productivity and a more tolerable work environment.

SIS PRE-OPERATIONAL PROJECT ACTIVITIES

Proposal Development and Program Planning

Several state SES's were approached by USES to determine their interest in experimenting with an upgrading project. While most of the agencies either turned down the overture immediately or were tenatively negative, the Ohio Bureau indicated a strong interest. This was based on the receptivity of Bureau management officials to change and on a long term and semingly successful experience with a traditional ES industrial service program. In addition, the City of Cleveland had operated a similar upgrading program, Skill Upgrading in Cleveland (SUIC), which had created a good relationship with local OBES officials. These factors, coupled with a visit by the OBES Deputy Administrator and the Director of the Ohio ES to the New Jersey ITS project, convinced Ohio officials to proceed with their attempt to secure special funding and establish the project. A letter was sent to OBES from the Department of Labor outlining the areas to be covered in the funding proposal. Then, a meeting was held in Columbus during March of 1971 to discuss the nature of the project, review the draft proposal, and clarify the role of E.F. Shelley and Company. The tone of the discussion at the meeting and the failure of the OBES staff to provide a working draft of the proposal at that time revealed an inadequate understanding both of the goals and approaches of the proposed program and the techniques proposal writing. While several OBES officials had visited the SUIC project, none, with the exception of the Deputy Administrator and the ES Director, had seen the Newark operation.

The result of that meeting was an agreement that representatives of E.F. Shelley and Company and OBES would meet three weeks later at SUIC in Cleveland where, with the assistance of the SUIC staff, the proposal would be reviewed. At the time of that subsequent meeting, OBES still had not produced a draft proposal, and a full day was spent discussing the goals and structure of an upgrading project. The OBES staff left that day with a relatively complete outline for the proposal plus an equipment list and staffing pattern provided by the SUIC Director. The program design resulting from these activities was strongly influenced by the neat, clearly defined components of the High Intensity Training approach that had been the starting point for both the Newark and Cleveland projects. The proposal was submitted to the Department of Labor during May, 1971, requesting approximately $350,000 to establish a program in the Ohio Employment Service to be manned by a staff of 24. The project intended to draw heavily on the employer data resources of the OBES Employer Relations program and the analytical capabilities of the OAIS staff; they also planned to establish linkages with community based manpower training and social service agencies.

Observations

The proposal, which was rather hastily funded at the end of the fiscal year, was unfortunately imprecise both in specific program content and reporting requirements for the contract year. This vagueness might have been avoided if USTES had provided clearer direction and stronger guidelines by requiring that the proposal include:

-- A detailed description of proposed analytical and training approaches;

-- A specific time line for project developments including program milestones with associated dates;

-- Procedures for periodic reporting on project activities.

While USTES guidelines did contain a request that the OBES proposal identify a project director and key personnel, the failure of OBES to comply and the neglect of DOL officials to follow-up on the request helped create many early difficulties in project operations.

It is evident that the inability of OBES to give adequate attention to the program planning process, the failure to have the proposal writers visit the Newark project, and the lack of a project director during the first five months of the contract greatly hampered the early development of the project. Not all the blame for the delay, however, can be laid at the OBES door. Although USTES funded the project in the middle or June, and OBES was advised by telegram in early July that the contract had been signed, it was not until the first week of August that all required papers were forwarded to Columbus by the DOL Regional Office. Unfortunately Bureau management was reluctant or unable to proceed until all the funding documents were received.

Staffing the Skill Improvement Systems Project

Many of the decisions made hastily during the proposal development process adversely affected the efficiency of the staffing procedure. The OBES proposal writers borrowed a staffing pattern from SUIC and job descriptions from ITS, fitting both to the salary classification system of the Ohio Employment Service. Although OBES had been encouraged to budget the project staff's salaries at levels somewhat above the regular ES salary structure, as was done for the Newark project, salaries were initially submitted at traditional OBES levels. The OBES proposal writers, drawn largely from lower management levels, apparently did not feel empowered to make decisions on new salary classifications.

As a result of poor communication between the proposal writers and OBES management, the Bureau Administrator was unaware of the low proposed salaries until faced with staffing decisions. He immediately moved to increase salary lines in order to attract highly qualified personnel. However, the State Personnel Department was unable to slot these new high-paying positions into the existing salary structure of the Employment Service. In order to overcome this problem quickly, an administrative decision was made to take the project out of the Employment Service and make it a new division of the Bureau with a salary structure pegged somewhat higher than that of the ES. Figure 1 indicates the relative position of the program before and after the change.

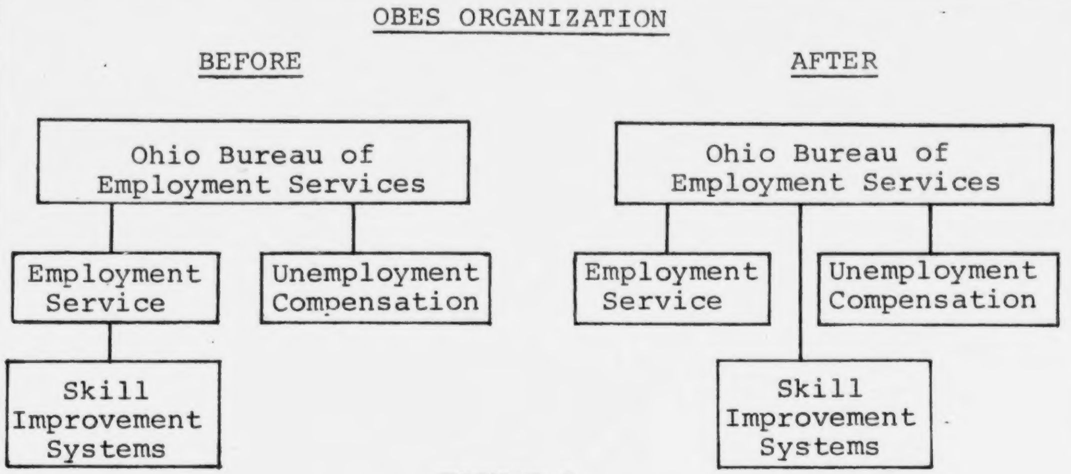
OBES ORGANIZATION
BEFORE
AFTER
Ohio Bureau of Employment Services
Employment Service
Unemployment Compensation
Skill Improvement Systems
Ohio Bureau of Employment Services
Employment Service
Unemployment Compensation
Skill Improvement Systems

FIGURE 1

Recruitment and screening was delayed for almost three months while paper flowed between OBES, the State Department of Personnel and the DOL Regional Office. When it became apparent that the project was bogging down in administrative difficulties, the Shelley staff asked USES to request a status report on the project. A telegram was sent to OBES through the Regional Office requesting a short report on program accomplishments. This seemed to trigger the Bureau into action, and in the fourth month of the contract, staff hiring was begun. Unfortunately, OBES was unable to locate a qualified candidate for the director's position until late November and therefore the entire staff was hired without the Director's participation.

OBES reported that recruitment and screening procedures for the project staff conformed to standard OBES personnel practices. Open positions were checked against existing lists of current ES employees who had taken tests for jobs at the next highest salary level; these employees were then given an opportunity to bid on the jobs. In addition, the personnel department searched its records for employees who had indicated an interest in changing jobs, and those with relevant experience; Despite the apparent attempt to recruit from within the Bureau, OBES hired a number of young, relatively inexperienced people from outside the agency to staff the program. As Table 1 indicates, of the 14 professionals initially hired, only three were employees of OBES. The remaining 11 staff members were recently out of college with little or no work experience or knowledge of the public manpower program. This staffing pattern differs greatly from that of Newark ITS, in which the New Jersey SES drew exclusively from its own staff moving the personnel of the existing OAIS program under the leadership of officials drawn from the State Commissioner's office.

Since the director's position did not have a comparative classification in the OBES salary structure, the Bureau was able to recruit outside the Service without posting the job. But, the opening was placed in the normal intrastate clearance listing thereby exposing it to the entire Bureau staff. Fortunately for OBES, the Skill Upgrading in Cleveland program terminated in November and one of its senior staff members applied for the position of SIS Director. Phyllis R. Payne, who was hired at the beginning of December, had been the leader of SUIC's curriculum development team for over a year and had previously worked as a training director for a large corporation. Therefore, she came to SIS with a firm understanding of industrial training and analysis techniques and their application in an upgrading program, as well as experience in marketing in-plant service programs.

TABLE 1

SKILL IMPROVEMENT SYSTEMS STAFF

POSITION WITH S.I.S.	AGE	LAST PREVIOUS POSITION	SECOND TO THE LAST PREVIOUS POSITION
Director	31	Project Coordinator - SUIC	Director, Training & Manpower Development Cole National Corporation
Supervisor of Operations	57	Health Coordinator, Columbus Area Community Action Organization (CMACAO)	Director of Counselors, New Careers
Supervisor of Research	40	Testing Supervisor, OBES	Testing Research Technician, OBES
Supervisor of Marketing	50	Industrial Services Training & Field Rep., Occupational Analyst, OBES	Manpower Development Personnel Officer, USAF
Statistician	24	Woolco Dept. Store - Asst. Mgr. Domestic Department	Economy Savings & Loan, Asst. Mgr.
Fiscal Clerk	33	Tax Consultant - Sears Tax Serv. E.B.S. Tax Service Inc. - Sears Northland, Columbus, Ohio	Tax Consultant - Cencor Tax Service Columbus, Ohio
Clerk Typist III, OBES	23	State Welfare Department, Typist	State Welfare Department, Typist
Trainee, OBES	32	Columbus Part, Supply Inc., Clerk	State Welfare Department, Typist
Clerk Steno I, OBES	19	Woolworth Department Store, Clerk	Industrial Services, OBES, Clerk
Marketing & Training Specialist	45	Interviewer, OBES	Wage Coordinator, North American Rockwell
Marketing & Training Specialist	23	Student	Student
Marketing & Training Specialist	25	Housing Specialist, Housing Opportunity Center, Columbus	Student
Marketing & Training Specialist	22	Sub-Teacher, Jackson Parish School Board, Jackson, La.	Band Personnel Trainer, Student
Marketing & Training Specialist	23	Recreation Director II, Columbus, Ohio	Recreation Leader I, Columbus, Ohio
Marketing & Training Specialist	23	Student	Student
Marketing & Training Specialist	23	Tax Agent I,	Student

Observations

Most of the staff was hired during October, but since there was no project leadership until late November serious morale and motivational problems arose. Many of the difficulties in the staffing process can be attributed to the lack of OBES management attention to the planning and initial start-up activities of the project. It communication between the proposal writers and Bureau management had been better, the planners might have had a clearer understanding of the program's goals, the error of pegging the salaries too low might have been avoided, and the project might have begun operations several weeks earlier.

The Shelley team was greatly concerned during the staffing period because of the limited work experience of those being hired. It had been their opinion that the staff should have had experience in or knowledge of industry, organized labor, training and problem analysis, and the public manpower program, or at a minimum should have worked in OBES for some time. Initial conversations with the staff indicated that they lacked significant understanding of OBES procedures, public manpower programs, industrial processes, and occupational information. As the program developed, however, it became apparent that the staff of an in-plant service project does not necessarily need to come to the organization with a wealth of background and experience in industry or the public manpower program. Although it is desirable to staff a program with experienced personnel, the leadership of a knowledgeable and capable director and the provision of a comprehensive staff training program can produce, within six to eight weeks, a staff capable of professional in-plant activities.

Staff Training and Development

The SIS project staff was relatively inexperienced, with little knowledge of manpower programs, unfamiliar with the upgrading concept and unaware of the intricacies of in-plant intervention. Exacerbating this situation was the fact that although this young staff had joined the project eagerly anticipating a new and exciting experience, the weeks of waiting for a director turned their enthusiasm to skepticism and even cynicism concerning the program, OBES and their futures. It was clear that an intensive staff training and motivational effort would be necessary.

Informal Initial Training

During the six-week period in October and November before a Director was hired, the Shelley staff worked with OBES officials in an attempt to organize a staff training program. SUIC, the Cleveland upgrading organization, had been expected to provide at least part of the initial training. However, the SUIC program was terminated by DOL, and we therefore suggested that the Bureau contact ITS in Newark to see if they would be willing to take on this task. The Shelley team also provided OBES with an outline of the broad skill and knowledge areas that might form the basis of a staff training package. The five major training areas identified were: communications skills, both written and oral; analytical and problem solving skills; training and teaching skills; reporting skills (since the program was to be documented for possible replication) and background knowledge on public manpower programs and Employment Service operations.* Unfortunately, because of the lack of leadership, little benefit was realized from this effort. Although several lower echelon OBES officials recognized the need to keep the staff busy, no one assumed the responsibility for making the necessary decisions. When this situation came to the attention of the Deputy Administrator, some staff preparation activities were begun. The staff engaged in a limited amount of background reading and research and received a brief course in task analysis conducted by OAIS personnel. However, the SIS staff had no real context in which to understand this training and tended to view it as busy work.

Formal Training Program

The new Director joined the project the last week in November, faced with pressure from the Bureau to get the project operational and with serious staff morale and self-confidence problems. On her very first day at the project, therefore, she began an intensive staff training program focusing on the subject that she knew best and that she believed would "turn on" the staff -- training system design. This training demanded active participation from the entire staff and soon re-established the enthusiasm which had dissipated during the previous six weeks.

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* This training approach is reflected in Section III, p. 18.

Briefly described below are the components of the staff training program:

- Training System Design (two weeks):

  The material for this section, developed by the director while she was at SUIC, was intended to teach the staff how to identify and analyze company manpower problems, do task analysis, create and test curriculum using behavioral objectives, and evaluate trainees and training.

- Human Interaction (one to two weeks):

  Getting a message across to an employer, both in marketing the program and explaining the findings and recommendations of a problem analysis, is a basic staff responsibility. The human interaction component was designed to improve communications skills and build self-confidence. Video tape was used to provide feedback for role playing sessions in which each member of the group acted out a marketing call. This exercise gave the staff an opportunity to confront some of the objections employers might have to the program (bad ES image, government red tape, etc.). It also provided an opportunity for the group to develop an initial statement of the purpose and benefits of the program. Several communications exercises were used, and even the most timid members of the staff seemed to enjoy their participation.

- Worker Traits Training (two days):

  To enhance the understanding of jobs and the relationships between occupations, the staff was provided with a two-day overview of the worker traits concept as offered in Volume II of the Dictionary of Occupational Titles. These sessions also stressed the importance of the worker trait concept to job analysis.

- Testing (one day):

  An orientation was conducted on the potential use and administration of vocational aptitude tests, specifically the GATB and SATB (General Aptitude Test Battery and Specific Aptitude Test Battery) in order to provide an overview of the techniques and importance of occupational testing in an employment setting and to introduce the staff to an OBES service.

- MDTA Skill Center-Site Visit (one day):

  Each staff member spent one full day at the MDTA Skills Center in Columbus to observe skill training and to initiate possible working relationships with the Skills Center staff. A tour of the Center revealed the entire scope of skill training and remedial education available through this institution. Most of the staff benefitted from the experience, and many felt that several more days would have been helpful.

- OBES Orientation (two days):

  Officials from several OBES departments briefed the staff on various aspects of the history, scope and substance of Bureau operations.

- NJSES Industrial Training Services, Site Visit (three days):

  The SIS Director was initially reluctant to let her staff visit the ITS program fearing they might be tempted to emulate the Newark model rather than develop one which met the particular needs of the Columbus labor market and OBES. However, she was aware of the value in having the staff visit an operating program and asked ITS to present a workshop on supervisory skills training. In two groups, over half of the SIS staff attended the workshops on how to use the ITS supervisory skills training package, and several staff members were able to observe ITS conduct a training session at a local hospital. Even after several months of program operation, the SIS staff members who had visited Newark emphasized the value of having seen an actual operating program as part of their training.

Although the staff training described above appears comprehensive, several knowledge deficiencies become noticeable as the SIS program began operations. For example, during conversations with employers, a number of topics arose which were unfamiliar to many of the staff, including certain manpower programs, civil rights compliance activities, wage and hours legislation and occupational health and safety issues. While not a critical problem, the lack of knowledge in these areas restricted the flexibility of marketing presentations and the scope of the resulting service packages.

A more serious difficulty was the staff's lack of writing skill, since the nature of the program requires extensive written communication in the form of letters, proposals, reports and training materials. Although all professional staff members were college graduates, only one or two demonstrated the ability to write clearly and grammatically. Several attempts were made to improve writing skills through training but with little demonstrable success. However, practice over a period of time seems to have improved the situation, and the Bureau plans to take a major step in solving the problem by assigning a competent writer to the staff.

Continuing Staff Development

Because of the pressure to establish in-plant projects, little thought or effort was given to an on-going staff development program. When an operational problem indicated a training need, someone was given the responsibility of researching the issue and reporting the findings to the rest of the staff. This, together with an uninspired attempt to build a library and the conduct of periodic staff meetings comprised virtually the entire staff development program. While this did not greatly hinder the staff in doing their jobs, it has substantially stunted the development of a capability to handle broader and more complex manpower management issues. Recently SIS has recognized a need to structure an on-going program of in-service training and has organized a committee to plan such a program.

Observations

The importance of a well designed, properly administered staff training activity for the personnel of an Employer Technical Services program cannot be overemphasized. In the case of SIS, the initial training enabled a relatively inexperienced group of people to perform complex problem-solving and training activities creditably. In future programs, even if the staff were to possess broad experience in industry and public manpower programs, training would be necessary to develop the consistency of approach required by a professional consulting and technical assistance program. Training would also be important for a staff drawn from present Employment Service activities. Here, training could break down the rigidities which sometimes characterize bureaucratic thinking and help create the enthusiasm and positive image required for this type of effort.

The training for the SIS staff was successful because the Director, having participated in a similar program, knew what skills would be required. Because she was relatively new to the manpower program and OBES, however, her training program emphasized the development of skills (sales approaches, and analytical and training techniques) rather than knowledge areas. As the project developed, the poor understanding of industrial processes, occupational content, manpower programs and the OBES structure hampered the staff in utilizing their newly acquired skills. As participant-observers, the Shelley team members were able to provide information and offer suggestions which ameliorated these problems, but other states wishing to replicate this approach should make certain that these knowledge areas are included in the initial training program. Finally, if an Employer Technical Services program is to be dynamic and responsive to current needs, it is imperative that a continuing staff development program be designed and actively pursued. Through a development program, a continued interest on the part of the staff can be maintained and program activities will not stagnate.

Operational Planning

Because the OBES proposal sketched only the broad outlines of the program and did not identify developmental goals and associated time frames, an operating plan had to be developed. As a transition from the staff training activity to the initial program operations, a planning task was undertaken. With strong leadership from the Director, the staff identified the major phases of program development and detailed many of the tasks in each phase. The Director, drawing on her experience in industry and at SUIC, provided the framework for the operating plan and encouraged the staff to participate in task identification and the creation of operational procedures. This group planning effort not only met an operating need but provided the staff with a context in which to better understand the six weeks of training they had just received.

Project Phasing

The program plan, as it was conceived by the staff, consisted of the four major phases outlined below:

-- Phase I - Operational Planning and Preparation for Marketing: During this phase operational planning would be completed and a procedural document and marketing plan would be submitted to OBES management for approval.

- -- Phase II - Marketing and Initial In-Plant Activities: This phase would involve the marketing of SIS services to employers through a direct contact campaign, with the entire staff assigned to some aspect of marketing activity. The plan outlined a procedure through which the marketing activity would be phased down as in-plant projects were established and staff were needed to meet these commitments. Plans were also made to investigate possible linking arrangements with other OBES units as well as locally based manpower service and educational institutions.
- -- Phase III - In-Plant Service and Continued Marketing: The plan called for the entire staff to be involved in technical service activities by the third month. Intense marketing was to be terminated when the staff was fully occupied with company projects. It was projected that formal direct marketing activity would not be needed after SIS had operated several in-plant projects and that new clients would result from referrals made by satisfied customers, Employer Relations Representatives and MDTA Contract Representatives.
- -- Phase IV - Evaluation and Documentation: The focus of the final phase was to be the evaluation and documentation of the program. Training commitments with companies were to be completed, unless it seemed certain that the program would be refunded. Also, some thought would be given to how the program capabilities might be transferred to other units in the Bureau.

Planning Task Forces

Once the major phases of the program were identified, task forces were organized to establish operational procedures. For the most part the task force activities were related to preparation for employer contact, and included:

- -- A planning group for the development of seminars for community business leaders, which it was hoped would lead to the development of an employer advisory group;
- -- A task force, led by the program's Research Director and including Shelley personnel, to be responsible for determining what information should be collected

on program activities and for creating procedures to meet the documentation requirements.

-- A fifth task force was established to design alternate service models. This last group was created because of a growing uneasiness among the staff that an overly flexible service approach would be too amorphous to "sell" to employers. The group designed six rigorous models ranging from the traditional HIT approach to complicated pyramided response structures involving differentiated service levels. While developing these was an interesting exercise, they were never directly used either in marketing the program or in responding to employer problems and service needs.

Observations

There is no question that operating procedures were necessary and the intent of the planning task forces was to develop guidelines for program implementation. However, many of the procedures developed during this period were either ignored or modified as the program became operational. There was some impatience on the part of the staff with this planning activity since they were eager to do rather than plan. This desire to "get into the field." along with the pressure by OBES management to establish company service projects, tended to make the staff act first and establish procedures later.

The lasting value of this operational planning process is not clear. Because the program goals and procedures were not developed prior to the training, the staff lacked a context in which to fully understand how they would use their newly acquired skills. The planning period did, however, provide an opportunity to assimilate what had been learned during the training and to reflect on how these skills might be used in an operational setting.

In retrospect, it seems evident that operational planning and procedure development should have been accomplished prior to the staff training activity. In this way, a context would have been provided that might have increased the impact of training. In addition, if the procedures had been available at the time the staff felt ready to begin operations, some wasted efforts during the initial stages of direct employer contact might have been avoided.

SIS PROJECT OPERATIONS

Marketing Activities

As a consequence of the nearly five-month delay in getting started, the staff was subject to considerable pressure from the Bureau to build a base of in-plant programs as quickly as possible. This time pressure precluded the development of a rational outreach strategy and caused the staff to rely primarily on a random approach in making employer contacts. In spite of some difficulties, in a relatively short time the marketing group was able to build a program base large enough to fully utilize the entire project staff.

The major thrust of the employer outreach effort is to identify employers who might benefit from SIS services, make them aware of the availability of those services, discuss with them their firms' needs and, when appropriate, finalize agreements on the provision of services. Since this process relies heavily on standard "sales" techniques, the SIS staff regards the function as marketing.

The initial marketing activities began the first week in January and continued for approximately six weeks. A senior member of the staff, who had formerly been with the OAIS unit, was given responsibility for directing and coordinating the effort. Over half of the staff were assigned to the direct employer contact activities.

The first few weeks of marketing were largely haphazard in the absence of a detailed outreach strategy and due to an inexperienced and somewhat naive staff. However, the methodical management of the Marketing Director and the ability of the Project Director to close a sale soon stabilized the process.

The following presentation of the marketing process contains some observations on problems encountered by the project staff, their responses to these problems, and the relative success or failure of the various techniques and approaches used. The outcomes of the first 46 company contacts are outlined in Table 2.

TABLE 2

SIS MARKETING SUMMARY

COMPANY NAME	SIC CODE	PRINCIPAL PRODUCT	SIZE OF WORK-FORCE	UNION, IF ANY	RESPONSES							
					Appointment Call Made	Cold Visit Made	Held Personal Interview	Refused Personal Interview	Agreed to TNS	Refused TNS	Why Refused*	Interested, But Not At This Time
Abex Corp. (Div. of Denison)	3561	Hydraulic Presses & Pumps	494	United Steel Workers	X		X			X	1,2,6	
Acme Laundry Dry Cleaning	7211	Laundry & Dry Cleaning	100			X				X	3	
Am. Education Publ. (Div. of Xerox)	2721	Print & Publish Educational Material	1070	AFL Printing Trades	X		X				4,1	
Am. Refrigeration, Inc.	5070	Ice Machines	19		X		X		X			X
Am. Zincoxide Corp.	2816	Smelting	195		X		X					X
Armstrong Furnace (Div. of Magic Chef)	3433	Cooling & Heating Equipment	460	United Steel Workers	X		X				5	X
Atlas Linen & Ind. Supply	7213	Industrial Linen	550	Teamsters-Truck Drivers		X	X			X	6	
B & T Metals	3352	Aluminum Products	194	UAW	X		X		X			
Beasley Industries	3714	Engine Rebuilding	239	Int. Assoc. of Machinists	X		X				5	X
Big Bear Bakery	5411	Supermarket	112		X		X			X		X
Bowman Dairy Co., Inc.	2026	Dairy	94		X		X			X	6	
Capital City Products	2096	Food Manufacture	341	Inter. Brotherhood of Firemen & Oilers	X		X		X			
Capital Mfg. & Supply Co.	3544	Dyes & Tools	45		X		X			X	7	X
Cardinal Industries	1511	Modular Homes	75		X		X			X	6	
Celanese Piping Systems	3079	Plastic Pipes	420		X		X			X	6	
Columbus Coated Fabrics (Div. of Borden)	2295	Manufacture Fabrics	1352	Textile Workers	X		X				5	X
Columbus Showcase	2541	Display Equipment & Showcases	315		X			X		X		
Cook United	5311	Department Store	2000		X		X		X			
Davidson Green Inc.	5511	Automobile Dealer	84		X		X					X
Falters Meat Packing	2011	Wholesale Meat	133		X		X			X	6	
Frecker's Ice Cream Co.	2024	Ice Cream	16		X			X		X	6	
Futon Corporation	3481	Barbed Wire	N/A			X	X			X	6	
Grant Hospital	8061	Hospital	1200		X		X					X
Hanna Paint Company	2851	Paint, Varnish, Chemical Coating	192		X		X			X	6	

(continued)

*1. Has own training program; 2. Too many employees on layoff; 3. OBES did not want this kind of industry; 4. Needs agreement of all of company management; 5. Union problems; 6. Company does not see a need; 7. Wanted to see results of program before accepting.

TABLE 2

SIS MARKETING SUMMARY (Continued)

COMPANY NAME	SIC CODE	PRINCIPAL PRODUCT	SIZE OF WORK-FORCE	UNION, IF ANY	RESPONSES							
					Appointment Call Made	Cold Visit Made	Held Personal Interview	Refused Personal Interview	Agreed to TNS	Refused TNS	Why Refused*	Interested, But Not At This Time
Jeffrey Manufacturing Co.	3532	Heavy Machinery	1950	Inter. Assoc. Machinists	X		X			X	6	
Joyce Shoes Inc.	3141	Shoe Manufacture	272		X		X				4	
Kinnear Corporation	3442	Garage Doors	210		X		X			X	5,7	
Lennox Industries, Inc.	3585	Heating & Air Condition Equip.	1000		X		X					X
OBES Office Service Dept.	9261	Printing Department	35				X		X			
Ohio Liquor Control Board	9156	Alcoholic Beverages	2600				X		X			
Ohio Packing Company	2011	Meat Products	241		X		X					X
Ohio Steel Fabricators	3441	Structural Steel	28		X		X			X	6	
Reliance Universal Inc.	3272	Concrete Products	30		X		X			X	6	
Ross Laboratories	2023	Baby Foods	1780		X		X		X			X
St. Ann's Hospital	8661	Hospital	250		X		X		X			
St. Anthony Hospital	8061	Hospital	615		X		X		X			
Shenago Company (Went out of business)	3362 3323	Foundry	397		X		X				5	
Simmons Company	2515	Bedding & Upholstery	554	AFL Local 24	X		X			X	6	
Swan Super Cleaners	7216	Dry Cleaning	425		X					X	6	
Taytec Corporation (Div. of Crane Plastics)	3079	Paint Manufacture	150		X		X					
P.S. Truesdell Co., Inc.	2071	Candies	100		X		X			X	6	
United Refrigeration Services Inc.	5077	Electrical Applicance Sales & Service	85		X		X		X			
U.S. Shoe Corporation	3141	Shoe Manufacture	N/A		X		X			X	1	X
August Wagner Breweries	2082	Beer & Ale Distributor	150		X		X					
N. Wasserstrom & Sons	2599	Wood & Metal Restaurant Equipment	154	Sheet Metal Workers	X					X	1	
Westerville Meadow Gold Dairy (Div. of Beatrice Foods)	2024	Dairy	180		X		X			X	1	
Westinghouse Appliance Plant	3632	Home & Heavy Appliance Manufacture	4800		X		X					X
Yenkin-Majestic Paint Co.	2851	Paint & Varnish Manufacture	128		X		X			X	1,5,6	

*1. Has own training program; 2. Too many employees on layoff; 3. OBES did not want this kind of industry; 4. Needs agreemen of all of company management; 5. Union problems; 6. Company does not see a need; 7. Wanted to see results of program before accepting.

Company Selection and Data Collection

The selection of industries and specific companies to be contacted by SIS seems to have been based primarily on the personal preferences of the staff. Although some consideration was given to industries having a large proportion of low-wage, low-skill occupations and those experiencing high turnover, the staff felt more at ease concentrating on those industries with which they had some familiarity or experience. A list of more than 30 firms was drawn-up to be used as the initial marketing base. The list was compiled from a number of sources, among which were:

- *The Directory of Ohio Manufacturers*, published by the Ohio Chambers of Commerce, which list employers by county and SIC code and provides information on size of the workforce, principal product and the name of the firm's president;
- Lists of firms which had been OAIS clients, compiled by the Marketing Director. His general knowledge of the Columbus labor market and specific knowledge of conditions in certain companies was a valuable aid;
- Lists of firms contacted by Skill Upgrading in Cleveland before its demise, with whom preliminary agreement on in-plant service programs had been reached;
- Suggestions from OBES Employer Manpower Representatives who were unable to satisfy company training needs through traditional MDTA or vocational education programs;
- Firms with which members of the SIS staff were personally familiar.

Once the base list was compiled, an effort was made to tap the Bureau's information sources to get specific employer data that would be helpful in making initial marketing calls. Originally, SIS had planned to collect 39 seperate items of information on each company, but later this was reduced to the following 15 key items:

-- Complete and accurate company name;

-- Correct address, telephone number and travel instructions;

-- Parent company name, if applicable;

-- Company president's name or the name of the "top official" if the company president does not actively participate in management;

-- Company product or service;

-- Unemployment Insurance Tax rate during last 2 quarters;

-- Whether the company is presently on the "DO NOT SERVE LIST" in the Local Office;

-- Number of job orders (ES-514-JB) received during last 2 quarters;

-- Number and name of different job titles on job orders;

-- Number of referrals to each job title;

-- Number of "hires" per job title;

-- Number of repeated orders for the same job title;

-- Number of new hires during the last 2 quarters;

-- Xerox copies of the ES-555 and all ES-555.1 on the company (Employer Record).

Because of the pressures of time, complete company data was not always collected, and even when it was, the information taken from the ERR files was often either inaccurate or hopelessly out of date. In fact, when one SIS marketer called a company to make an appointment with the president, whose name he had taken from the OBES employer files, he was told that the man had been dead for 14 years!

Direct Contact Campaign

Although plans were discussed to undertake a general marketing effort, including the wide distribution of an SIS brochure, the sponsoring of an employer workshop-seminar, and the establishment of an employer advisory committee, these plans were never implemented. The project staff seemed to feel that a non-personal approach would be too time consuming and, at least initially, the personal marketing techniques would be more effective in developing in-plant programs. Therefore, they relied totally on a direct employer contact approach.

The SIS direct contact procedures required that a staff member begin by making a telephone call to an employer to set up an appointment for a personal visit. In accordance with OBES rules, the Employer Relations Representatives were supposed to approve all contacts with employers. Prior to the contact effort, the ERR staff was briefed on the goals of the SIS program, and initially, phone calls to employers to set up SIS appointments were made by the responsible ERR. SIS found, however, that this procedure was often more a hinderance than a help. The ERR's usually worked only with company personnel directors while SIS felt the need to contact higher corporate officials in order to "sell" programs. After the first week the SIS staff decided to sidestep regulations, and with the approval of the ERR unit they began making their own appointment calls.

At first the procedure of calling before visiting was followed, but after a number of unsuccessful calls, the staff became impatient and began visiting employers without an appointment and too often without adequate preparation. These unannounced visits were mostly unsuccessful and a decision was quickly made to re-establish the requirement of a definite appointment with the highest possible official in the company before making a visit.

The initial presentations made to employers by the SIS staff were weak and ineffective. The staff had no publicity materials to use, not even business cards, and seemed rather uncertain of what they were selling. They relied heavily on the experiences of ITS in Newark in trying to explain to employers what their program could do. They had been trained fully in analytical and training techniques, but were ill-equipped to carry on informed conversations with employers about industrial processes, personnel management practices, the public manpower program, or the multiplicity of federal and state regulations affecting the relationships between employers and their workers. After a number of frustrating experiences and negative responses, the staff became better able to respond to an employer's stated needs, overcome his reservations concerning the program and convince him of the potential value of SIS services.

The marketing activities were monitored through debriefing meetings at the end of each day. Staff members, in describing their marketing contacts, tended to rationalize the situation by placing the blame on employers for unsuccessful visits rather than examining their own shortcomings and trying to improve their presentations.

On-Going Marketing Activities

After the initial six-week direct contact campaign, the entire staff was assigned to the several in-plant programs already started, and the marketing effort was completely halted. No plans were made for a formal on-going marketing function, since it was expected that referrals from both the ERR unit and satisfied clients would be sufficient to keep the staff busy. However, approximately four months later when the first round of in-plant projects was nearing completion it became apparent that another intensive marketing push would be necessary. Further, in response to concerns voiced by USES officials over the reduction in openings and placements achieved by the State Employment Services, OBES management requested SIS to solicit job openings as part of its marketing effort.

In the middle of May, 1972, six staff members were reassigned to full-time marketing activities. At first the marketing effort focused on securing job openings. Unlike the earlier effort in February, the new thrust did not include pre-marketing data collection and recording of results. During this period, marketing usually consisted of unannounced visits to employers. Selection of employers was generally at random, frequently using the *Directory of Ohio Manufacturers* as a source for names and addresses. It also appears that little effort was made to link this effort to the Bureau's ERR activity. While this marketing approach was effective for the solicitation of job-openings, (more than 150 orders were taken during this period), it was of no value for the development of service programs.

SIS therefore elected at this time to return to the marketing procedures followed during the initial effort including: a careful selection of employers; a strong pre-marketing research effort; telephone contact to set up an appointment with the employer prior to a visit; and a marketing presentation highlighting the total OBES program as it relates to an employer's needs. During this second marketing effort several approaches were used in selecting potential firms for contact. The fourteen firms which indicated an interest in the program during the first marketing campaign were recontacted. Firms in industries where SIS had done some work, such as food processing and hospitals, were surveyed and the OAIS Division files were reexamined for potential leads.

After a slow start, the May marketing activity resulted in a sufficient number of in-plant programs to keep the staff occupied. However, at this point, rather than completely terminating the marketing activity, a decision was made to maintain a minimal marketing effort on a permanent basis. One staff member was assigned full-time to employer contact activity. The project also has now begun to engage in some general outreach activities by having staff members appear on local TV shows, speak to business groups and conduct mail surveys to determine initial employer interest in training programs. A brochure, business cards, and other publicity materials necessary to present a professional image to the business community have finally been made available and it now appears that these broader outreach approaches and the success of the first few in-plant programs are beginning to result in the anticipated employer referrals.

Observations

In reviewing the initial marketing activities of the SIS program, one is impressed by the apparent ease with which an inexperienced staff was able to convince employers to permit a new and untested organization to intervene in their personnel and production processes. Despite the unstructured nature of the outreach effort noted above, in-plant programs were developed in a relatively short time.

OBES management expressed some concern over the fact that a number of the SIS service programs were concentrated in relatively low paying industries and asked the SIS staff to begin to focus the marketing effort on the better paying durable manufacturing sector. The SIS staff marketing team has begun to respond to this request, but they recognize the difficulty of cracking these firms which tend to be large, well organized and not particularly receptive to government intervention in their operations.

SIS was most successful at establishing programs in small firms employing from 100 to 500 workers. Large companies with sophisticated training departments usually had no need for SIS services. Retailing and health service organizations proved to be the best targets for training programs. This was probably due to the SIS Director's knowledge of these industries, the staff's ability to talk intelligently with company decision-makers about the potentials of the program to meet their specific needs, and the fact that training in these industries is usually non-technical and non-manual.

The Training Needs Survey

The employer contact process has two major objectives. The first is to make a preliminary assessment of company manpower problems based on discussions with selected management officials. The second objective is to secure an agreement to provide, if it seems warranted, an in-plant problem analysis and/or service program.

During the first few months of program operation, SIS was heavily training oriented -- and the name of the problem analysis component, Training Needs Survey, reflects this emphasis. The TNS was initially focused on identifying those problems that could be solved by special upgrading training programs. However, as the project staff became more familiar with industrial settings, job content and occupational structure, management techniques, and other aspects of the workplace, they broadened the scope of the TNS. As a result, the SIS staff sought to make more meaningful recommendations to employers for improving the plant environment and production process, restructuring jobs, revising unnecessary educational requirements for particular jobs, and improving communication between management and workers. While the TNS was originally intended merely to support the marketing process -- as a tool to identify the need for training programs -- the broadened approach developed by SIS and the high quality of the non-training recommendations have made it a valuable service in its own right, one which employers both need and appreciate. It should be pointed out, however, that not all situations required in-plant problem analysis. Where the employer had a firm understanding of his organization's problems and an idea of the types of services required, the formal problem analysis was omitted.

The TNS Process

The TNS process, which leans heavily on interviewing company management and production workers, has two components: 1) Research and Data Collection; and 2) Analysis, Formulation and Presentation of Recommendations. The steps involved in each part are briefly outlined below:

- Research and Data Collection

  -- A project team is assigned to conduct the survey, with one member of the team designated as coordinator. The size of the team depends on the perceived magnitude of the job and the personnel avaliable at that point in time. (The SIS team usually has from three to five members.)

  -- Some preliminary research is carried out in preparation for in-plant activity, such as reading appropriate generalized job descriptions and interviewing persons knowledgeable about the client company's industry. For example, to prepare for a TNS in a hospital dietary department, the team visited another hospital and interviewed the head dietitian to secure an understanding of the typical problems of a hospital food service operation and the terminology they would need to know to do the study. Also, an effort is made to secure company organization charts, floor plans of the departments to be surveyed, specific job descriptions if available, the union collective bargaining agreement, and other pertinent data.

  -- An interview guide, in the form of a checklist, is then designed covering all aspects of the study. The staff rejected the idea of a formal questionnaire, claiming that the checklist approach provides enough structure for orderly collection of data, but with sufficient flexibility to insure a full response from those interviewed. This lack of formalized research instruments has precipitated certain difficulties in analyzing the interview data, and has led to a recommendation for the use of a more structured approach. (See Section III, p.87).

  -- A company management official, usually the personnel director or a vice president, is identified as the SIS contact. Arrangements for the study are made with the contact person at the time the company agrees to the TNS, or later by the TNS coordinator. These arrangements include identifying the departments to be surveyed, securing space for interviews, scheduling of interviews with selected employees, and insuring that company personnel are properly notified about the purpose of the SIS survey and the interview schedule.

  -- The next step is the interviewing of appropriate managers, supervisors and production workers. The interviews are conducted on company time and are scheduled, when possible, during slack periods. SIS feels that the interviews are best conducted with one person asking questions and another taking notes. The average interview with managers requires one hour, with supervisors and workers thirty minutes.

-- In most cases, after the interviewing has been completed, the staff spends some time observing the workflow in the plant. The insights gained from this observation provide the context necessary to understand the interview data and the operational environment of the company. The survey team find these observations most useful and often return a second time to gain additional understanding.

- Analysis, Formulation and Presentation of Recommendations

-- Drawing on the interview data, all problem indicators are listed on worksheets. Counter-indicators, data which seem to contradict the problem indicators, are similarly listed (e.g., one man says there is a racial problem in the company, another says there is no racial trouble). These indicators are then grouped by category: problems due to lack of skill or knowledge (poor training procedures); those resulting from a lack of proper motivation or incentive (attitude problems); or environmental problems (unsafe working conditions, unsatisfactory equipment, poor sanitation, etc.).

-- Recommended solutions to the identified problems are then developed in committee by the TNS team. This "brainstorming" process was difficult for the staff at first, and it was necessary for the Director to formulate almost all the recommendations for the first few surveys. Other difficulties arose when the staff felt compelled to recommend upgrading training, and therefore tried to phrase problem statements to fit an upgrading solution. Gradually, they realized that non-training recommendations implemented through management action could accomplish significant change in a plant and serve to ameliorate production and personnel management problems.

-- The TNS findings and recommendations are finalized in a document which serves the dual purpose of informing the employer of the results of the survey activity and, if appropriate, proposing a program of remedial action. The document contains an abstract, a statement of the significant problem areas, a series of training recommendations, a statement of SIS and company responsibilities for program implementation and a series of non-training recommendations. For the SIS staff, writing this document was, and to some extent still is, the most difficult of their tasks. The staff included no one with both the experience and the ability to organize and write an effective report. The analytical perceptions and the validity of the recommendations were frequently obscured by the illogical, unstructured and ungrammatical presentation in documents forwarded to employers. The Shelley staff provided some level of editorial assistance to improve the quality of the presentations, and now OBES plans to assign a skilled writer to the project.

-- The report is hand delivered to the appropriate official in the client company, and a preliminary discussion of the recommendations is held. Sometimes these officials react immediately; often they ask for time to consider the ideas presented and to discuss them with other company officials. If there is an agreement on a training program, SIS negotiates the details with a company representative. SIS will provide assistance in the implementation of non-training recommendations if it is requested. (A TNS report prepared by SIS is included as Exhibit A, page II - 59.)

Observations

The ultimate purpose of the Training Needs Survey is to identify those problems which seem to have an adverse effect on the firm's workforce and production process. It is difficult to assess accurately the quality of the analysis and the impact of the problem presentation. For the most part, the recommendations made in the eight TNS's performed by SIS have been accepted, and most have been implemented. Each of the eight organizations were pleased with the TNS results, and there is little doubt that as the staff gains experience, the quality, depth and validity of the problem statements and service recommendations will have even greater impact.

This in-plant problem analysis activity can be questioned from several viewpoints. First, there is the question of whether the results justify the high cost, both in terms of fianacial and human resources. Initially, while the staff was gaining experience, TNS activities for even small organizations ran as high as 75 man-days at an estimated cost of $5,000 to $10,000.

As the staff became more adept at the information gathering and analysis, this figure was reduced to 10 to 15 man-days with costs below $2,000. A second and perhaps more basic question is whether this is an appropriate activity for a State Employment Service. To be sure, some aspects of the activity -- turnover, absenteeism, and comparative wage studies; occupational content and structures analysis; etc. -- have been traditional components of the Industrial Services program for a number of years. But the TNS activity often goes far beyond these technical areas by investigating employee attitudes, process problems and unsatisfactory environmental conditions. For example, as a result of the analysis performed prior to developing a training program for a retail organization, the shelf labels in the stores were redesigned by the SIS analyst, thereby eliminating laborious arithmetic calculations formerly required for each multiple item purchase. While one might ask why an Employment Service should provide management consultant services such as this, it can be pointed out that the rather stiff arithmetic ability requirements for the sales clerk job were subsequently lowered because of this change, thus opening the job to a large number of people previously considered unqualified. Another issue is whether an SES should "compete" with private business consultants. While all of the services provided by SIS can be purchased from private, profit-making organizations, it is unlikely that the small, often marginal firms with limited discretionary resources and over-committed management served by SIS would be able to take advantage of the services of management consultants. Although the quality of the SIS analysis may not be up to the standards of an established business consultant, the TNS presentations of in-plant problems have had major impacts on company operations. Smaller companies need this type of assistance, as demonstrated by the fact that they often agree to an upgrading program merely to secure the problem analysis service.

Technical Assistance

In addition to the analytical services outlined above, SIS offers other forms of assistance to employers ranging from traditional industrial services to complex training packages designed to enhance worker skills and improve morale, motivation, and supervisory practices. Specifically, these services include: occupational analysis; testing and test development; job description writing; training program design and curriculum development; and classroom and on-the-job training. The particular service offered will, of course, depend on the results of the problem analysis. In those cases where management officials are prepared to specify a service need, SIS will proceed without an analysis if the employers' perceptions seem to have at least face validity.

In-Plant Training Programs

The SIS approach emphasizes training as a solution to most company manpower problems. However, several of the company programs have involved job analysis, testing, and other consultant services in conjunction with or independent of a training program. For example, in one organization significant upgrading was accomplished by merely restructuring the career progressions. And, in a retail establishment a new position was created at the suggestion of SIS to create a bridge between the sales and buyer occupational groups. In that firm a training program was also developed to facilitate the sales person's transition to the buying career progression. The SIS emphasis on training is due in part to the orientation of the Director, but is perhaps more a result of the project's MDTA contractual obligations which call for the upgrading of 300 workers. In addition, the SIS staff development activities emphasized training needs analysis, curriculum development and training techniques. Therefore, the staff is far better equipped to do training than either marketing or problem analysis. It is for this reason that the real strength of the SIS program lies in its capability to prepare and deliver effective, high quality training for workers and supervisors.

The first few company training programs served as a testing ground for SIS, enabling the staff to determine what was feasible and which approaches had the greatest payoff. in terms of employee advancement and employer acceptance. It soon became clear that an employer's ability to provide upgrading opportunities was severely constrained by the occupational structure and salary classification systems of the company. In most of the organizations served by SIS, the real need was for remedial training to increase the effectiveness of selected groups of employees in their present jobs, rather than to train them for higher level positions. Often the occupational structure of the organization was relatively compressed and there was limited opportunity for meaningful advancement. In several situations, critical skill needs existed in higher level jobs, but the training required to prepare lower level employees for those jobs was beyond the technical capability of the SIS staff or the available resources of the program. Similarly, the salary classification systems of many firms inhibited more than a token increase in salary. Any significant salary increase in one position often requires upward adjustments throughout the classification system. Despite these difficulties companies are willing to agree to small increases in pay and changes in job titles in order to take advantage of the training services offered by SIS.

Employers seem most pleased with training in "soft" areas such as communications, supervisory skills, human relations, and motivation. SIS has just begun to undertake technical skill training. Unfortunately, the fact that there are only two staff members with useful industrial experience severely limits the range of training that might be attempted. Until now, all training has been conducted by SIS staff members, unlike the Newark program which makes use of outside trainers and training facilities such as the Newark MDTA Skills Center. The ITS program has over the past several years found a way to enrich its skills training capability by tapping the resources of the New Jersey Department of Vocational Education through the use of regular MDTA institutional skills training funds. Specifically, ITS submits multi-occupational proposals to the Vocational Education Agency. Upon funding, the monies are deposited with the Newark Skills Center with ITS considered the "client firm". In those firms where ITS determine that the need for skills training is beyond the reach of their own training staff, they make application to the Skills Center for a trainer with the requisite skill. The Skills Center, using the MDTA funds on account, either selects someone from its own staff or reaches outside for a consultant and assigns him to ITS to provide the in-plant skills training portion of the project. The ITS staff oversees the entire program, teaches communications and personal development skills, provides instructional materials evaluates the skills training and issues certificates of completion. Encouraged by the success of these programs, ITS has continued to work with Skills Center personnel in arranging for in-plant training in more than 15 skill areas, all financed by regular MDTA funds.

SIS has been reluctant to tap the Columbus Skills Center for assistance in technical training. Part of the reason for this is the poor reputation the Skills Center has in the Columbus employer community. In addition, the first few in-plant programs did not involve skill training beyond the capabilities of the SIS staff. However, over the next few months SIS is committed to at least two programs involving sophisticated technical skills training. In one case, a refrigeration repair course, the program has been designed and organized by SIS, but the actual training will be provided by company personnel and refrigeration equipment vendor representatives. In the other situation, a welding course is required, and preliminary discussions with the Skills Center are planned.

The training programs SIS has developed and conducted range from a simple one-hour orientation on company procedures to an extremely sophisticated multi-media programmed instruction course on inventory control. During the first few months of operation, SIS accepted several training tasks that might be considered questionable for a public manpower agency. It was felt that even though the training activity might lie outside the mandate of the program, the experience gained in writing the curriculum, developing training materials and providing the training would be a valuable staff development activity. Now that most of the staff has participated in at least one or two training programs, SIS has become far more discriminating in the selection of appropriate training activities.

Training Program Design

If a valid training need is uncovered during the inplant analysis or is directly requested by the employer, the next step in the process is a curriculum development effort. The process of curriculum development is viewed as a cooperative effort between the client and the SIS staff. Although SIS does the actual writing of the curriculum outlines, the development of performance tests and the design of all training materials, the client must supply the information, operational manuals and resources for the task analysis necessary to produce a quality training program. The team that performs the company's Training Needs Survey is generally carried over to become the curriculum development team. The size of the team is determined by the complexity of the job and requirements in other parts of the SIS organization.

The steps necessary to produce a curriculum follow the generally accepted techniques of training program design practiced by many public manpower training programs and private companies. These usually include:

-- Doing a job task analysis to provide a detailed description of each task or element of a job;

- -- Writing objectives for the training in behavioral terms, (e.g., "the trainee will be able to operate a high speed offset press.");
- -- Creating a test to be administered before the training begins and again at the end of the course to measure the learning that has taken place;
- -- Making a behavioral analysis -- a flowchart or schematic representation of the step-by-step process to be followed in the training program;
- -- Developing a curriculum outline based on detailed task analysis of the target jobs;
- -- Writing the full curriculum and developing training materials (including illustrations, reading materials, tests, etc.);
- -- Testing the curriculum with a group similar to those who will receive the training and making revisions based on that experience;

Considerable time is necessary to develop a fully documented training curriculum. This is particularly true of the SIS system which stresses a detailed approach to all aspects of the task. The program's rule of thumb in estimating curriculum development time is that six hours of development are required for every hour of classroom training. However, several shortcuts are possible:

- -- Much time and energy can be saved if some or all of the curriculum materials can be borrowed from outside sources and adapted to fit the company's needs. SIS has been able to "borrow" materials for much of the curricula created thus far. For example, in the SIS hospital training package, the Supervisory Skills curriculum is almost entirely taken from Newark ITS materials (which in turn were largely borrowed from other sources), and the Food Service Operations curriculum is adapted from a commercially available programmed learning course. In planning for work with Ohio Department of Liquor Control, SIS sent one staff member to Pittsburgh, Pa. to review and borrow from a training program that a consultant developed for Pennsylvania's Liquor Board.
- -- Some consideration is being given to the Newark ITS approach described above which utilized an outside training consultant to develop the technical skills curriculum and give the training. Because the trainer is familiar with the technical aspects of the target jobs, he can do the

behavioral analysis, task analysis and test development in a fraction of the time it would take an analyst not thoroughly familiar with the occupational content. This process is considerably less expensive than the SIS approach, but too often an outside consultant is unable or unwilling to document his curriculum, thus affording little potential for others to replicate his training.

-- The most efficient approach to reducing curriculum development time is the creation of standard training packages generally applicable to local labor market needs. These packages contain core curricula that are flexible enough to be modified to fit the individual styles of similar institutions. For example, the Safety and Sanitation program created for one hospital has been used successfully in two other medical institutions in the Columbus area. Each time the curriculum is reused it serves to offset the initial cost of curriculum development.

Training Techniques

In order to increase the possibility of a multiplier effect, the curriculum and training materials are carefully packaged. In addition to the training materials, a supporting Instructor's Guide is developed for each program. This is used by the SIS trainer and subsequently, it is hoped, by a company trainer. The procedures for conducting the training depend upon the style of the company, the availability of facilities and the scope of the training. Generally the trainees are selected by the company without the participation of SIS. A training schedule is established and distributed to the trainees, the number of sessions being determined by the complexity of the training task. SIS has offered company training programs ranging in length from one hour to 120 hours. Individual training sessions average two to three hours each, with time alloted for refreshment breaks. When possible, the training is conducted on the company premises during working hours. In two programs for retail establishments in which trainees worked in various stores throughout the Columbus area, training was conducted in the centrally located offices of SIS. Because of the non-manual nature of the training conducted to date, most of the training has been of the classroom variety.

SIS provides loose-leaf manuals for each trainee containing all training materials and pre/post tests. During the training sessions, the trainers guide the trainees through the materials by leading discussions, pointing out key concepts, reading some material aloud, and by using training aids such as flip charts, slides, movies, and video tape. the trainees are encouraged to apply key concepts in the performance of exercises in class and transfer them to the actual job situation. Practice is continued until the trainees reach an adequate level of performance. An informal atmosphere is maintained in class and trainees are encouraged to ask questions, express opinions or demonstrate alternative methods of completing a task.

Since most of the participants are either long out of school or have been unsuccessful in traditional classroom situations, a variety of stimulating techniques are necessary to keep their interest and attention. Therefore, extensive use is made of audio-visual materials and this is felt to be a key factor in the success of the training. The SIS staff's imaginative choice of visual aids for training is demonstrated by the use of an old Laurel and Hardy film, "The Music Box", which pointed out to a group of supervisors the need for planning and good communication. Although there are a number of standard training films on the subject of planning, SIS felt that the Laurel and Hardy film, supported by a structured discussion, would probably have a more lasting impact on the trainees. Video tape has been used in those situations where the trainees would benefit from seeing how they performed a particular task and has also been used as a staff development tool providing the trainer with feedback on his performance with the class.

Observations

As stated previously, the development and execution of training programs is perhaps the most outstanding attribute of SIS. All employers served have expressed complete satisfaction with the training activities. In fact, a major difficulty has been in terminating activity in a particular organization. It was hoped that training programs would be reused by the client organizations, and substantial efforts have been made to prepare company trainers, but in most cases, formal training has terminated as soon as SIS completed its work. However, there is some indication that while the training programs developed by SIS are not continued by companies, the experience of having professional trainers working in the facility has generally improved the overall quality of training throughout the plant.

The one major criticism that might be made of the SIS service approach is that it relies too heavily on training as a solution to company manpower problems. Perhaps a more lasting and significant impact could be made if greater emphasis were placed on structural change as a mechanism for improving the manpower management processes. However, employers are resistant to experimenting with structural modifications and the work involved in recasting upward mobility systems is probably beyond the capabilities and resources of a typical State Employment Service operated program.

SIS PROJECT OUTCOMES

It is still too early to make an accurate assessment of SIS project outcomes. As of this writing the project has been fully operational for approximately 11 months, during which time the focus of the program has shifted substantially, from the one-step upgrading program outlined in the funding proposal to the broader employer technical services approach reflected in this document. The SIS proposal called for the upgrading of 300 employed workers during the 12-month contract period, and indicated expected salary increases of 8% to 10%. These upgrading goals were based on the HIT experiences of SUIC and ITS (which had goals of 330 upgrades in 18 months) and these expectations seemed, at the time of the proposal development, to be both reasonable and attainable. However, the project has been unable to reach the upgrading goals because of the delays in making the project operational, the inexperience of the staff, and the experimentation required to broaden the service approach. In addition, the project was never fully staffed. The Director did not want to bring on additional personnel until a larger program base could be established, and when it became obvious that there would be refunding difficulties, it was decided to continue at the reduced level in order to extend the program's duration. SIS has, therefore, operated at approximately 2/3 of its authorized manning, at an annualized rate of approximately $216,000 rather than the $371,000 authorized.

SIS will have assisted in upgrading between 160 to 180 workers at the end of the first 12 months of full operations. The salary increases achieved by the trainees range from 5.5% to 15% with an average increase of approximately 9%. Upgrading however, is only one aspect of the SIS program and cannot serve as the sole criteria for measuring the benefits of this effort. The outcomes of this project might be classified into three groups: benefits to workers, assistance to employers and impact on OBES.

Benefits to Workers

Although the collection of trainee data has just begun and no detailed analysis has been accomplished, there are indications that many of the individuals currently being trained by SIS in the name of upgrading are those who would normally have been promoted without an extraordinary training effort. To this point there has been little evidence that the workers participating in the training were blocked from promotion or that the SIS activity relieved blockages either through training or restructuring. The major advantage for both the company and the trainee seems to be that the SIS program has enhanced and formalized training processes which at best were usually informal OJT. While the training provided may have only an indirect impact in terms of upgrading, it offers several important advantages for the worker. Through training, the worker is given an understanding of the totality of his job and its relationship to the work process. Further, the supportive nature of the training situation is more likely to produce positive learning than the usually unstructured OJT procedure which is affected by the pressure of the production environment. If it appears that morale or productively will be improved, SIS provides training services which may not have an immediate or direct upgrading impact. As Table 3 indicates, SIS has or will provide 654 hours of training to 447 workers. Approximately 1/3 of this training was directly in support of an upgrading program, but all training met demonstrated needs in the organizations.

The enhancement of skills through training is only one aspect of SIS benefits to the worker. Another major benefit to the worker is the improvement in the plant environment and structure that often results from recommendations made during the TNS process. SIS has been particularly successful in identifying unhealthy physical working conditions and convincing management to correct the deficiencies. For example, in a company involved in forging operations, SIS recommended that the ventilation be improved and that the workers be provided with non-flammable aprons to reduce the possibility of burns. Although management had been aware of these needs for some time, the SIS report seemed to move the company to correct these deficiencies, thereby creating a safer, more tolerable work environment.

In the opinion of the Shelley team, the major benefit to workers has been the training of 141 supervisors and foremen. There is a growing awareness among management officials that first line supervisors and foremen, because they are generally not prepared to assume the human relations aspects of their responsibilities, are the cause of many personnel difficulties affecting worker productivity. An employee who might otherwise find a particular job rewarding is often moved to quit because of communications or other difficulties with his supervisor. Improving supervisory practices and making foremen and lead workers aware of their subordinates' needs is an important aspect of the SIS program and one that can demonstrably improve the work situation. Because no trainee follow-up have been promoted without an extraordinary training effort. To this point there has been little evidence that the workers participating in the training were blocked from promotion or that the SIS activity relieved blockages either through training or restructuring. The major advantage for both the company and the trainee seems to be that the SIS program has enhanced and formalized training processes which at best were usually informal OJT. While the training provided may have only an indirect impact in terms of upgrading, it offers several important advantages for the worker. Through training, the worker is given an understanding of the totality of his job and its relationship to the work process. Further, the supportive nature of the training situation is more likely to produce positive learning than the usually unstructured OJT procedure which is affected by the pressure of the production environment. If it appears that morale or productively will be improved, SIS provides training services which may not have an immediate or direct upgrading impact. As Table 3 indicates, SIS has or will provide 654 hours of training to 447 workers. Approximately 1/3 of this training was directly in support of an upgrading program, but all training met demonstrated needs in the organizations.

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TABLE 3

SKILL IMPROVEMENT SYSTEMS - TRAINING ACTIVITIES

	COMPANY SERVED	SIC	SIZE OF FIRM	TRAINING TRACK	NO. OF HRS.	NUMBER OF TRAINEES	NO. OF UPGRADES OR RAISES	UPGRADE TITLES	PERCENT INCREASE
1.	Alum Crest	8069	210	Math Tutoring	20	11	0		
2.	Alum Crest	8069	210	Food Svc.	16	12	12	Food Svc. Worker II	5.5%
3.	Alum Crest Hospital	8069	210	Supervisory	16	11	0		
4.	B & T Metals Company *	3354	110	Supervisor	28	9	9	Foreman-Trainer	5.5%
5.	Buckeye Plastics **	3079	110	Supervisory	16	11	0		
6.	Buckeye Potato Chips **	2099	50	Sales/Driver Salesmen	32	20	14	To Be Negotiated	
7.	Buckeye Steel Castings	3324	1,200	Math & Blueprint	40	21			
				Supervisory	11	50		To Be Negotiated	
8.	Capital City Products *	2096	255	Supervisory Training	16	29	0		
9.	Capital City Products	2096	255	Machine Opr. Orient.	16	30	20	Machine Operator	8.1 %
10.	Cook United, Inc. (3 Columbus Stores)	5311	150	Department Head	50	12	12	Department Head	7%
11.	Doctor's Hospital West	8062	320	Nurse Aid	15	17	17	Nurse Technician	8%
12.	Mabley & Carew	5311	1,200	Supervisory	16	45	15	Alternate Supervisor	10%
13.	Mabley & Carew	5311	1,200	Entry Salesperson	22	11	0		
14.	Ohio Department Of Liquor Control	9651	2,850	Clerk I	30	16	16	Clerk II	10%
15.	Ohio Dept. Liq. Cont.	5921	2,850	Asst. Store Manager	90	28	16	Store Manager	
16.	Refrigeration Contractor's Assoc.	7623	400	Repairman	120	12	12		15%
17.	St. Ann's Hospital	8069	250	Food Service Operator	16	35	0		
18.	St. Ann's Hospital	8069	250	Supervisory Training	16	12	4	New Supervisor	5%
19.	St. Ann's Hospital	8069	250	Lead Worker	12	4	4	New Category	5%
20.	St. Ann's Hospital	8069	250	Nurse Aide I	16	31	26	Nurse Aide II	5%
21.	Union Fork & Hoe Co.	3423	300	Supervisor/Trainer	40	20	0		
				TOTALS	654	447	177		

* In Progress
** Proposed

has yet been done, it is impossible to determine whether the activities of the SIS project have had a positive impact on morale and productivity or have served to reduce absenteeism, turnover or other counter-productive behavior.

Assistance to Employers

The Industrial Services program of the Employment Service has traditionally offered assistance to companies in the form of occupational analysis, turnover studies and the identification of possible training needs. The SIS approach provides many of the services offered by the IS program but with two major differences.

Active Solicitation and Follow-up

The first difference is the manner in which the program is marketed. Historically, IS has been a reactive service, providing assistance to a company only when the employer asked an Employment Service representative for help. As a result, while many firms are in need of IS services, they are unaware of their availability. This condition was documented in a recently published report employer attitudes toward the ES which pointed out that:

> "What is not open to question, is the widespread lack of awareness on the part of employers of the diversity and potential usefulness of [technical] services which can contribute directly to the effectiveness of employer's hiring and operational processes."*

SIS actively solicits employer participation through the marketing process, and approaches a company on the basis of its particular needs and not solely on what the program can offer. If the SIS staff can provide a service to solve a company's problem, they will do so; if not, they will attempt to locate a community resource with the appropriate capabilities.

Solving the Problem

The second major difference between the IS and SIS approaches is that while the Industrial Services program generally only identifies the nature of an in-plant problem and sometimes may recommend a solution, SIS will often provide whatever training, testing or analytical services seem indicated to ameliorate the difficulty. In many cases the employer already understands his, problems and an analysis, while interesting, is often not needed. Even if an employer knows how to relieve the difficulties, limited resources or lack of technical expertise may inhibit the development of a remedial program. SIS is prepared to offer assistance in just this situation.

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* Report of the National Employer's Committee for Improvement of the State Employment Services, prepared for U.S. Department of Labor, Washington, D.C., July 1972, p.22.

The types of services offered by SIS to various business and governmental organizations are summarized in Table 4 and are described in greater detail in the Problem/Response Abstracts in Section III of this report.

It seems evident that employers appreciate the offer of these services even in cases where they do not feel their organization can benefit from SIS assistance. Many companies have expressed their appreciation by giving job orders to the SIS marketer, and all the firms served by SIS have begun to use OBES as a manpower source, despite the fact that several had ceased using the Bureau as a hiring source because of alleged poor service. But perhaps the most revealing item is that firms already served by SIS have continued to request additional services.

Impact on OBES

A major expectation of OBES management in accepting DOL's invitation to operate an upgrading program was that this new and innovative employer service activity might serve to improve both the Bureau's Employer Relations program and its rather substantial OAIS operation. In large measure the SIS program has lived up to this expectation. While there has been some disagreement between SIS and Bureau management concerning the priorities and procedures of the program, for the most part SIS had been responsive to Bureau needs and has provided a model of what a forceful, intelligent approach to employer contact can accomplish. For example, during an experimental three weeks of intensive job development carried out by five members of the SIS marketing team, more than 160 job openings were secured -- considerably more then the openings developed by the Bureau's ERR unit. And when it became apparent that the placement unit was not adequately servicing these orders, rather than sit back and say, "I've done my job, you do yours," the SIS Director developed a monitoring

TABLE 4

COMPANY SERVICE ACTIVITIES

COMPANY SERVED	SIC CODE	SIZE OF FIRM	TNS PERFORMED	MAJOR PROBLEMS IDENTIFIED	JOB RESTRUC-TURING	TESTING SERVICES	REFERRAL TO OTHER SOURCES	SKILLS TRAINING	NON-SKILL TRAINING	NUMBER OF UPGRADES
Alum Crest Hospital	8061	210	No	Skill/Knowledge, Attitude		Yes		No	Yes	12
Anchor Hocking	3229	N/A	No	Environment			Yes	No	No	0
B & T Metals	3352	110	Yes	Skill/Knowledge, Structure				No	Yes*	9**
Buckeye Potato Chips	5149	50	Yes	Skill/Knowledge, Attitude				Yes*		14**
Buckeye Plastics	3325	110	Yes	Structure				No	Yes*	0
Buckeye Steel Castings	3323	1200	Yes	Skill/Knowledge, Attitude				Yes*	Yes*	0
Capitol City Products	2096	225	Yes	Skill/Knowledge, Environment, Structure				Yes*	Yes	20**
Cook United	5311	150	No	Skill/Knowledge				Yes	Yes	12
Doctor's West Hospital	8061	320	No	Attitude				Yes*	No	17**
Mabley & Carew	5311	1200	No	Structure, Skill/Knowledge	Yes			Yes	Yes	15
Ohio Dept. of Liquor Control	9651	2850	No	Skill/Knowledge				Yes	Yes	16
OBES Office Services	9671	50	Yes	Structure	Yes			No	No	3
Refrigeration Contractors Assoc.	7623	400	Yes	Skill/Knowledge		Yes	Yes	Yes*		12
St. Ann's Hospital	8061	250	Yes	Skill/Knowledge, Structure	Yes		Yes	Yes		8
Union Fork & Hoe	3423	300	Yes	Environment				No	Yes	0

system which permits periodic follow-up on the referral status of all orders written by SIS personnel. As another indication of the confidence OBES management places in the program, SIS has now been asked to apply their analytical skills to the problems of the Bureau itself and has undertaken a Training Needs Survey for the Columbus local office.

The present thinking of OBES management concerning the future of the SIS operation is perhaps the best indication of the impact that SIS has had on the agency. It now seems clear that the special funding that has supported the SIS program will most likely be unavailable in the next fiscal year. In fact, the Regional DOL office has indicated that there is no money available to extend the project through the last quarter of the current fiscal year. However, OBES management is currently considering reallocating resources presently available within the Bureau to continue the Columbus based effort, and if possible expand the program to the Cleveland and Cincinnati districts. While it is too early to determine whether these actions will be taken, the statements of Bureau management concerning the value of the SIS program can be viewed as honest expressions of their feelings of the worth of the SIS experience.

Observations

The lack of valid or accurate outcome data makes it impossible to develop a clear picture of the potentials of the SIS program. However, despite the experimental nature of this project, there is reason to believe that the services provided by SIS are well within the capability of a State Employment Service and beneficial to a selected portion of the employer community. Whether the benefits to companies and their workforces can be justified in terms of the costs of the program, and whether an employer technical services component is of a high enough priority to justify exporting the effort to other jurisdictions cannot be determined with the limited data presently available on this program. However, it is hoped that outcome data from another year's operation, taken together with the almost four years of experience in the Newark ITS program will provide a data base for a more precise investigation of benefits and potentials.

PROGRAM DOCUMENTATION USING PARTICIPANT-OBSERVATION TECHNIQUES

Participant-observation methodology was used by the Shelley staff to collect data and document the development of the Skill Improvement Systems project. This research approach, which is a basic data collection tool in social science research, requires the researcher, or participant-observer, to become a part of the process to be studied so that developmental activities can be analyzed as they unfold -- rather than after the fact. An important advantage of this methodology is that observations relevant to the situation under study are likely to have transferability beyond the setting from which they were derived. Thus, participant-observation was employed in this situation to insure that the program documentation produced would be for replication of the SIS program in other jurisdictions.

Planning the research design was begun from the model used by Arizona State University in documenting and evaluating the Phoenix Concentrated Employment Program.* Because the Shelley team's efforts were limited to the documentation task, the Arizona methodology was modified to suit the needs and styles of the research team and those of the SIS project staff.

The following observations are offered based on this experience with participant-observation -- not as generalizable statements of fact, but as perceptions of the problems inherent in this approach and possibilities for its future use:

-- The use of participant-observation methodology can result in documentation that combines the objectivity and broad thinking of an outsider with the detailed programmatic knowledge and perceptions of operating personnel.

-- The activities of a participant-observer can be instrumental in encouraging a program staff to be more reflective and analytical about program content and direction than they might be otherwise.

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* *Phoenix Concentrated Employment Program Volume 1, Participant-Observer Methodology*, Final Report, Arizona State University, Phoenix, Arizona, 1969.

-- Technical assistance can be offered to an operating project as a by-product of the participant-observation process, without either overwhelming or threatening the program staff.

-- The assignment of a participant-observer team to the documentation and/or data collection task might result in complete abdication of all responsibility in these areas by the project staff.

-- While it is valuable for the participant-observer to have a strong background in the program area, the temptation to become overly involved must be resisted or the researcher's objectivity may be eroded.

-- Constant shifts in program procedures and priorities, as well as the periodic crises that attend any developmental effort, dictate a flexible approach to the research methodology and a willingness to continually modify participant-observation procedures.

-- Despite the fact that participant-observers have access to information not generally available to outsiders, staff defensiveness may develop (particularly if the program's future is in doubt) which can inhibit research activities.

-- The participant-observer should avoid becoming enmeshed in internal controversies or too deeply involved in the funding or refunding process.

Role of Observer as Participant

The Arizona State CEP report suggests that the participant-observer may assume several different roles. These levels of involvement comprise a continuum from complete participant to complete observer. The role selected for this study is classified as "Observer as Participant" in which the observer's activities are made publicly known at the outset and they are more or less sponsored by people in the situation being studied. The goals and planned activities of the Shelley team were made known from the beginning to both the Bureau management and the project staff. Periodically the staff was provided with the opportunity to review the research procedures and, if appropriate, to suggest modifications to the planned approach. In this way access was gained to a wide range of information not generally available to outsiders.

The proposed form for the Shelley team's participation in the project was that of a *consultant.** Because of their considerable background in the upgrading field, it was assumed that they would be accepted by the staff as a group possessing the knowledge and abilities necessary to provide assistance in solving various developmental problems. However, because of the operational needs of OBES and the personal predilections of the Shelley researchers, they decided to expand their participation in the project, assuming the function of *brokers.** In this broker capacity they attempted to harmonize the talents, experiences, interests and problems of various groups and individuals, on the one hand to assist the OBES project in its development effort, and on the other to further define the concept of upgrading and its place in the public manpower program.

The Shelley staff spent approximately two man-weeks per month in Columbus, generally in two, three-day visits. Each visit to Columbus required a lengthy reorientation procedure during which a reintegration into on-going project activities was necessary. Based on previous contacts with ITS and SUIC, the Shelley staff had a general feeling for the process flow in such projects. If this substantial experience in the upgrading area had been lacking, the reorientation process for each visit would have been even more time consuming. It would seem, therefore, that a participant-observer unfamiliar with the program area would be unable to use this non-resident or periodic visitor approach. Some of the insights gained during participation in the program and some of the specific problems faced by the Shelley team are described below.

Participatant-Observers as Consultants

The consulting activities of E.F. Shelley and Company in this project can be classified into three major areas: Information system Design and Data Collection; Marketing and Employer Contact Assistance; and Problem Solving, Technical Assistance and General Support.

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* The terms *consultant* and *broker* are offered by Marvin B. Sussman in his paper "The Sociologist as a Tool of Social Action." Reprinted in *Sociology in Action*, Ed. Arthur B. Shostak, Irwin Dorsey Press, Homewood, Ill., 1966.

- Information System Design and Data Collection

Since E.F. Shelley and Company is primarily an information systems firm deeply involved in manpower data collection systems, one of the team's major contributions was assisting in the development of an internal information gathering and reporting system for the project. This involved the identification of key data elements, design of data collection instruments, recommendation of data storage procedures, testing and documentation of the system for installation in other jurisdictions.

- Outreach and Employer Contact Assistance

Using their knowledge of in-plant service program, the team provided some assistance in the marketing and employer contact process. Their major contribution in this area was the preparation of a brochure entitled "Upgrading Your Workforce: A Key to Productivity" (see Section III, page 80) intended to acquaint employers with the relationship between a broad approach to upgrading and improved productivity. The brochure has been tested in several different upgrading projects and distributed to more than 500 union leaders, business representatives, educators and government officials. For the most part, the pamphlet was well received, but the concepts proved to be too global and the language too sophisticated for the smaller organizations that are most often served by the SIS program. Several representatives from smaller companies said they felt the brochure placed too heavy an emphasis on improved communication and structural change, solutions which are more applicable to the problems of large organizations. For the most part, large companies spoke highly of the brochure. Some of this praise might be attributed to the fact that in these larger organizations, the pamphlet reached personnel or employee relations directors who are by orientation more attuned to the sentiments expressed in the document than are the production oriented managers of smaller firms.

- Problem Solving, Technical Assistance and General Support

A major portion of the consulting activities involved general problem solving and confidence building. From the outset, because of the delays experienced by OBES in getting the project started, the Shelley team was forced to broaden their planned participation. Although both the E. F. Shelley and Company and OBES contracts began at the same time, it was more than four months before OBES started the project. In that slack time, assistance was given to the Bureau in doing preliminary planning for staff training, data collection and marketing. The team's usefulness here was limited by the fact that the OBES officials assigned to work with them were not primarily responsible for the upgrading project and therefore unable to respond to many of the suggestions or offers of assistance, but the continued presence of the Shelley staff did encourage OBES to accelerate efforts to get the project started.

During the early stages of the program, before the Director was hired, a portion of the staff looked to the participant-observers for guidance and reassurance. Although they could be of only marginal help in providing direction, for fear of taking too great a role in project development, the personal relationships developed at that time were valuable throughout the term of the Shelley involvement.

Perhaps the most significant consulting activity was in encouraging the SIS staff to review their procedures and accomplishments. The Shelley data collection procedures required that the project staff periodically decribe their activities. This proved a useful exercise because in general the SIS personnel were not particularly reflective about the effectiveness and broader implications of project operations. Initially, monthly meetings between Shelley and project staff had been planned to discuss the program's operational and planning issues, but unfortunately, scheduling difficulties precluded implementation of this procedure. Attempts were therefore made to accomplish this same task on a one-to-one basis, meeting with individual members when time permitted. In retrospect, it seems that the failure to pursue the planned monthly meetings was a mistake. This message was brought home during a project staff meeting held to review the outline for this documentation. During the meeting, not only did the staff provide insights into the program which might not otherwise have been offered, but all expressed the feeling that the discussion had been valuable. And in fact, out of the ideas generated at the meeting, several new programmatic approaches are now being tested.

Finally, one of the major contributions of the Shelley team was in providing editorial services and considerable technical assistance in the preparation of reports. (The project staff's limited ability to prepare professional, well-structured documents was mentioned earlier in this report.) A substantial portion of the team's time in Columbus was spent in helping the SIS staff develop this capability. In addition, the Shelley progress reports served the project as a data base for the preparation of SIS narrative reports to OBES management.

Some Problems as A Consultant

As the outset, the Shelley staff had little experience with the participant-observer approach and the first few weeks were spent developing a methodology that suited their talents and met the peculiar needs of the situation. During this initial period several different approaches were tried, and this lack of consistency may have been confusing to the staff and to some extent may have inhibited the free flow of information. While the staff was generally openly disposed and even friendly to the research team, they often became defensive when detailed information on a particular aspect of the program was sought, and too often interpreted questions as personal criticism. For example, if asked why SIS did something in a particular way or whether they had explored other possibilities, their response was, in several cases, a rationalization of their present procedures rather than a considered analysis of the alternatives.

A persistent problem encountered in working with project staff was maintaining a balance between advising and observing, helping and participating, detachment and personal involvement. Although they were expected to provide technical assistance, the Shelley team did not want to impose their opinions and ideas to the extent that their objectivity was destroyed and the staff lost responsibility for project direction. If the team solved the project's problems, they would be unable to document how another SES would approach these difficulties. Because the team was, in a sense, a non-replicable "experimental artifact," the documentation had to be complete enough to help another agency solve problems without the help of an outside consultant. The method found most successful in dealing with the staff and helping them solve problems or make programmatic decisions was to assist them in defining alternatives, explore with them various possibilities and then withdraw from the process while they made the final choice or decision.

A corresponding difficulty was how to satisfy the staff's expectations of what services should be provided. Often on arriving in Columbus, the Shelley team was greeted with overwhelming requests for assistance in the writing and editing of reports and letters. While this was an area where they could make a significant contribution, the team's Columbus trips were generally for specific data collection purposes and often they were unable both to accomplish the planned work and to satisfy SIS needs. Moreover, the research team never found a comfortable way to say no to the SIS staff and still maintain a cooperative relationship.

Participant-Observers as Brokers

Because the Shelley contract was utilization oriented, the participant-observer team anticipated having to serve as a communication link among OBES, the Department of Labor and other appropriate manpower projects. However, at least in the early stages of SIS development, the nature of this participation became more and more operational -- changing from a communication link to a broker. These broker activities can be classified in two major areas:

- Linkage Activities

  At the time SIS was conceived, it was expected that SUIC would provide operationally based training for the Columbus staff. When it was learned that SUIC's refunding was in doubt, a two-pronged approach was begun to insure that the new staff would have some operational training. The first effort was to assist SUIC in developing a new refunding proposal. Several different ideas were developed, but the effort failed, and SUIC as an operationaly agency terminated in October, the same month that OBES hired its first staff member. The second approach was to enlist the help of the Newark ITS program. While in many ways ITS -- being a State Employment Service unit -- was more appropriate than SUIC as a training resource for OBES, the geographical separation presented some logistical problems. With the cooperation of NJSES, the Shelley team assisted in arranging for three cycles of training for the SIS staff.

  The Shelley contract also called for maintaining contacts with and opening communications among the several upgrading projects currently operating. A section of each progress report was devoted to a description of these contacts and it was found that the team's role sometimes extended beyond that of a reporter. In addition, project administrators were encouraged to call each other for advice, and in one case the Shelley team made arrangements for a meeting of four groups to discuss the potentials of upgrading for the working poor. Among the projects and agencies visited were: Vermont Employment Service; Skill Upgrading in Cleveland; Metropolitan Cleveland Jobs Council; Pennsylvania Employment Service; Humanic Designs, Inc.; Training and Technology Program; Job Opportunities for Boston; Industrial Training Service; Columbus Model Cities Upgrading Program; Columbus MDTA Skills Center; Syracuse Upgrading Project; National Alliance of Businessmen.

- Monitoring, Mediating and Marketing Activities

As mentioned earlier, the Shelley staff tried to accelerate the start-up of the project by directly assisting OBES whenever possible. When the situation appeared to require more drastic measures, the difficulties were communicated to appropriate DOL officials, and the resulting prodding from the Regional office may have helped get the project underway sooner. In addition, when SIS was up for refunding, assistance in expediting this effort was provided by having the Shelley project officer in the Office of Research and Demonstration contact USES and relate ORD's interest in the SIS extension. A meeting with OBES officials was also initiated to discuss the future of the SIS program, at which the Shelley staff pointed out that the supplemental DOL funding presently paying for the program might be unavailable in the next fiscal year and that if the Bureau wished it to continue, OBES management might have to consider reallocating existing Bureau resources.

When communications difficulties and tension developed within the project itself and between project management and Bureau officials, the neutrality of the Shelley team often enabled them to ease the situation by assessing conflicting views and faciliting communication.

Because Shelley activities were intended to result in a broad utilization of the SIS experience, a part of the team's activities could be considered marketing. Talks were held with several SES administrators and USES officals in order to assess their receptivity to the development of a broad-based, sophisticated Employer Technical Services program. In general, interest and good receptivity were found on the state level, but federal officials expressed disinterest and even disbelief that a State Employment Service could be capable of undertaking such a program.

Some Problems as a Broker

While these broker activities were sometimes helpful and particularly enjoyable for the Shelley staff, the role caused some difficulties. For example, because the team acted as a communication link between OBES and the Department of Labor, OBES began to perceive them as a DOL surrogate. The team's efforts to help SIS secure refunding seem to have been interpreted by some OBES officials as an indication that the participant-observers had an important role in the refunding process.

In addition, the Shelley staff occasionally found themselves in the middle of disputes between SIS and Bureau officials. While they tried to avoid either having to defend the project's actions to management or having to interpret Bureau policy for SIS, the Shelley team was not always successful in riding the fence and several times were put in the uncomfortable position of a messenger, carrying bad news to one or the other party.

Data Collection Procedures

Data on the SIS project was collected by the participant-observers in three ways. The first involved informal conversations with members of the staff and actual participation in project activities; the second was a structured interview, or debriefing procedure; the third was through forms designed to be completed by the project staff. Some difficulty was experienced with each method, but the execution of forms by the staff seemed to be the least effective. Unfortunately the SIS Research Director became involved in other project operations and lost interest in the rather tedious data collection activities. Therefore, the Shelley team assumed almost total responsibility for collecting project data.

Information was collected in two general categories. The first was statistical or outcome data which reflected program accomplishments. The forms for collecting this data were intended to become a part of the regular SIS data collection procedure. The second kind of information was process data, that is data on how the work of the project was carried out and why things were done in particular ways. The forms and procedures developed to record this data were solely for research purposes and were not intended to be continued after the Shelley participation in the project terminated. Outlined below are the various methods used to collect these two types of information.

• Statistical and Outcome Data

This data consists of names, numbers and other "hard" or statistical information. The Shelley team had originally thought that much of this information, particularly on trainees, would be collected on the MA-101 form, a standard data collection form for Department of Labor Work and Training Programs. However, the OBES officials responsible for the collection of trainee information felt that the MA-101 was not appropriate for reporting SIS activities and unfortunately did not suggest an alternative. Also, the MA-101 was inadequate for keeping track of non-training efforts. Therefore, working with SIS, the Shelley staff developed a series of forms for recording relevant information on all SIS activities. The forms are described below and generalized formats are provided in Section III of this report.

- -- *The Training Program Record* (see p. III - 43) contains information about client companies, the types of training provided, the length of training and the numbers of employees trained. It also provides space for cataloging curriculum materials and asks for staff comments on the training program.
- -- *The Trainee Information Form* (see p. III - 43) contains data on trainee characteristics, work history, services provided by the project, and some results of training. Additional follow-up information for program evaluation can be added when available.
- -- *The Company Service Record* (see p. III - 41) contains data on all non-training services provided to companies such as job order taking, referral to other ES services, training needs survey, counseling, etc.

- Process Data

Since process information is not easily quantified, gatherering data on the development of in-plant service programs was accomplished by interviewing project staff and by observing and actually participating in the project activities. Process data was collected on the methods and rationale for all marketing, analytical, service and training operations performed by the staff. At first the research team tried using questionnaires to be executed by the staff after each appropriate experience. However, since the staff was either reluctant or unable to provide meaningful process data through this mechanism, it was decided to use a debriefing approach to information gathering. Debriefing instruments were developed for both the marketing and TNS operations. Although the project Research Director was originally slated to participate in the debriefing process, his other duties precluded his participation. The Shelley staff, therefore did most of the interviewing and data recording. The techniques used are outlined below:

- -- To collect data on the marketing process the principal SIS marketing person for each company was interviewed and his impressions recorded on the debriefing form. All appropriate documents (letters, reports, marketing forms) were collected and attached to the form. Supporting this direct interviewing, the Shelley staff participated in marketing activities by accompanying SIS staff on several employer visits and listening to many marketing phone calls. In addition, they attended meetings between SIS and the ERR staff concerning the establishment of linkages between the two OBES units. Finally, the Shelley team interviewed Newark Industrial Training Service Staff members about their marketing techniques to provide a point of comparison and to enrich the data.

-- The data collection procedures for the TNS were similar. The Training Needs Survey teams were interviewed and their impressions of the process recorded. Since the TNS is a team effort, an attempt was made to have a group interview of the entire team so that a full report could be recorded, but in several cases only the team coordinator was available for debriefing. In addition to the debriefing, all interviewing and analytical documents used in the TNS process were collected, and several interviews were held with Newark ITS staff concerning their in-plant analysis techniques.

-- It was originally hoped that curriculum development and training could be documented in the same manner. However, as these processes developed, it became clear that these activities did not lend themselves to a debriefing approach. It was found that curriculum writing and training involved mental processes which were best understood by participating in some way in the process and informally talking with SIS staff members.

Some Problems with Data Collection

The value of the participant-observation methodology in the data collection process is not easily assessed, although it now appears that a complete documentation of the project without participant-observers might not have been accomplished. However, no one on the Shelley team was particularly pleased with the data collection effort. Efforts to enlist the participation of the staff in designing the information system were unsuccessful; and, when the system was installed there was, considerable staff resistance to what they considered unnecessary paperwork.

Information on processes and description of procedures had to be squeezed out of project staff through individual and time consuming interviews. But even more disturbing was the difficulty in collecting outcome data. The SIS staff was either negligent or reluctant to provide this data, particularly trainee characteristic and background data. They took the position that this had little to do with the quality of the service provided or its impact on the individual. Since the Shelley team was not in the position to require the staff to collect information, much of this data is missing, making an accurate assessment of project outcomes difficult.

Some Problems as a Participant-Observer

Because as participant-observers the Shelley staff had access to information that reflected certain weakness and irrationalities in the SIS development process and current operating procedures, they were faced with two difficult problems in preparing this documentation. The first was whether to describe the project's activities and experiences as they actually happened or as they should have happened. An attempt has been made to solve this problem by separating the description of the SIS project from the technical material on how to set up an Employer Technical Services program. However, even in describing what occurred in the OBES project, it was sometimes necessary to impose more of a structure than actually existed in order to make the descriptions understandable.

The other problem was determining what portion of the negative developmental experience encountered by SIS to record. Because of the nature of a large bureaucracy, such as a State Employment Service, ineffeciencies in process are often unavoidable. Unfortunately, when these situations are reported they may seem to cast a bad light on the people involved in the process. Some critical statements are unavoidable if a realistic picture of the SIS experience was to be provided. The Shelley team has made a strong effort to be as objective as possible and hope any criticism will be viewed as a constructive attempt to help others avoid the same difficulties.

SECTION II - EXHIBIT A

OHIO BUREAU OF EMPLOYMENT SERVICES
145 SOUTH FRONT STREET P.O. BOX 1618
COLUMBUS, OHIO 43216

N J. GILLIGAN, *Governor*

WILLIAM E. GARNES, *Administrator*

IN REPLY REFER TO

COMPANY "X"

TRAINING NEEDS SURVEY

OHIO BUREAU OF EMPLOYMENT SERVICES

SKILL IMPROVEMENT SYSTEMS DIVISION
Third Floor
309 South Fourth Street
Columbus, Ohio 43215

Telephone: 469-5050

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ABSTRACT

Title of Paper: Report On Training Needs Survey And Proposal For Training

Submitted By: Skill Improvement Systems Division of The Ohio Bureau of Employment Services

Division Director: Phyllis Payne

Project Manager: Allen J. Swaim

I. Objectives:

This survey was designed to uncover problem areas, to trace the root causes of those problems, and to recommend solutions. Skill Improvement Systems (SIS) has particular expertise in providing training for those problems for which training is the answer.

II. Methodology:

While SIS set out to concentrate its efforts in the maintenance area, it found that maintenance is directly affected by the competence with which other company functions are performed. Therefore, employees from other work areas in the plant were interviewed, conclusions were drawn, and recommendations were made concerning the maintenance department and several other related operations.

The interview phase of the training needs survey began February 15, 1972. Five SIS staff members conducted interviews with 17 maintenance men. Subsequent interviews and in-plant observations were conducted by various staff members. Interviews were conducted with the Plant Engineer, the Maintenace Control Supervisor, the Packaging Maintenance Supervisor, and the Supervisors of the Hydrogenation and Refinery Departments. Other interviewed were: Supervisor in the Margarine Department, Superintendents and Foremen in the refinery.

The information gained through interviews and observations has been fully analyzed and problem areas have been pinpointed. Training is recommended for those problem areas in which it is appropriate. Other recommendations and suggestions are put forth for those problem areas in which training would be inappropriate. SIS is prepared to support company management in efforts to solve many of these identified problems.

STATEMENT OF PROBLEM AREAS

A. Summary of Problem Areas

The problem indicators which we found during the interview and observation phase of the training needs survey were grouped together insofar as they were found to have common features and causes. When so grouped they showed problems in the following major areas:

1. There is a lack of generalized skills among the maintenance workers.
2. Career ladders are not open for maintenance personnel.
3. The test for entrance into the Maintenance Man I position is highly criticized by Maintenance Men II.
4. Manpower is being wasted by allocating skilled maintenance workers to tasks calling for lower skill levels.
5. Maintenance scheduling policies are highly criticized by plant personnel.
6. Maintenance requests and assignments are not always efficiently communicated.
7. Operators lack skills and knowledge concerning the equipment and machinery with which they work.
8. Little maintenance work is done on the second or third shift.
9. The company lacks an orientation booklet.

B. Problem Areas Amplified

Analysis of the interviews and observations conducted by the SIS staff indicates that there are several areas in which training could help company workers to function more efficiently. These areas are staffed by maintenance workers, operators, clean-up workers and supervisors.

1. Cross-Training

With respect to the workers engaged in the general area of maintenance (maintenance mechanic, pipefitter, welder, electrician) we have found that there is an undersirable lack of cross-training. That is, some mechanics do not do well in light electrical repair activities, etc. This situation is disclosed by the skill inventory attached in the Appendix and is confirmed by the employee interviews.

2. Career Ladders

Both management and maintenance workers expressed dissatisfaction with the lack of career ladders in the maintenance area. Management is disappointed that none of the men have the skills to be promoted to the Maintenance Man I classification. The workers feel that some among them, in fact, possess the requisite skills for this classification.

3. Testing For Promotion For Maintenance Man I

The workers also feel that the company is using an artificial test for promotion to Maintenance Man I, that they should be rated for promotion solely on the basis for performance and ability. Further, the workers feel that the company has not defined the qualifications needed by a worker to achieve the Maintenance Man I classification and that the company is not seriously trying to fill this classification. The feeling that promotion is blocked has led to morale problems among the workers.

4. Efficient Manpower Allocation

SIS found that there is waste in the assignment of maintenance manpower. Many repairs require the assignment of two maintenance workers. But, very often the need is not for two fully-skilled maintenance men. To accomplish many repair or adjustment jobs only one journeyman maintenance man with a helper is needed. For instance, SIS learned that many maintenance jobs requiring welding or torch cutting require that a man stand by with a fire prevention kit. This fireman has been a maintenance man II. He could be someone less-skilled and lower-paid. Though he is needed as such, the second man in these two-man jobs is often only a helper and a wrench holder.

5. Efficient Maintenance Scheduling

Among the workers and supervisors interviewed by SIS there exists an almost universal questioning of what appears to be the company policy on the scheduling of maintenance. Presently the policy seems to be that a machine perceived to be running in a damaged state is often allowed to run until it becomes totally inoperative. To be sure, there are times when this would be an intelligent procedure. But there is a feeling in the plant that a blanket policy exists, as stated, which costs the company excessively in downtime on the machinery.

6. Handling of Maintenance Requests and Assignments

There appears to be a need for enforcement of communication lines with respect to repair requests. Some inefficiency was noted in getting repair requests to the maintenance department and particularly to the maintenance supervisors. This information came from the maintenance workers. The maintenance supervisors seem satisfied. However, instances have occurred when, because of breakdowns in communication and priority-setting, maintenance has not been able to function efficiently.

7. Skill Shortages Among Operators

Management, the supervisors of maintenance men, the supervisors of operators, and maintenance workers agree that operators lack training and therefore skills in working with their machinery and equipment. Valves are turned improperly causing damages. Lines and pumps are not "blown out". Other incidents of operator neglect and malfeasance are costing time and money.

8. Proper Supervision of Clean-Up Activity

The personnel involved in clean-up lack direction and supervision. Interviews, particularly with supervisors, indicate that there is no systematic cleaning schedule within the plant. Nor is there any central supervision of clean-up men. This leads to whole areas being omitted from cleaning for long periods of time. The same sources indicate a need for hard information concerning cleaning agents and techniques.

9. Additional Maintenance on Second and Third Shifts

Nearly all interviewees agree that efficiency of production and maintenance would be improved by assigning more maintenance workers to the second and third shifts. However, to a man the day shift maintenance workers indicated that a transfer to another shift would cause them to leave the company.

10. Company Orientation

None of the workers interviewed had a clear understanding of the history of the company, its position in the market, or the system used to distribute the company products. They had some understanding of company benefits such as hospitalization.

C. Positive Findings

One aspect of the information gained from interviews was pleasing to the interview team. Worker morale appears to be quite high. This is especially true of maintenance personnel. A spirit of camaraderie and mutual support pervades the maintenance department. The men seem to have a high regard for present management. They like and respect their supervisors. They feel that company management is "doing something" for them.

With respect to their pay and working conditions the men feel that they are paid adequately for what they do. The exception here is that many who feel this way also indicate that "nobody ever feels he's paid enough". They accept the physical aspects of their work and the plant and the limitations inherent in both.

TRAINING RECOMMENDATIONS

Five broad areas in which training would help Company "X" solve problems related to the maintenance department were revealed by the training needs survey:

A. Skill Training For Present Maintenance Crew

SIS proposes to provide training for maintenance people in welding techniques, elementary electrical work and shop math.

Trainees would be selected on the basis of skill inventories so that training units would aid maintenance people to fill gaps in their knowledge and thus enable them to be more versatile on the job. For example trainees who are competent at welding but need shop math would be included in the shop math section but not necessarily in the welding section. Upon successful completion of training, as determined by SIS trainer ratings and on-the-job performance ratings from Company "X" trainees would receive a promotion from classification as maintenance man II to maintenance man I.

Acceptance of this training program will assure Company "X" that it will have a maintenance crew which is versatile and can handle a variety of maintenance responsibilities efficiently.

B. Training For Second and Third Shift Maintenance Personnel and Maintenance Helpers

SIS proposes to provide training for at least six people in all three areas mentioned above (shop math, welding techniques and elementary electrical work).

Trainees would not be expected to come to training possessing as much proficiency as the current maintenance crew.

Training would then be geared toward building a proficiency which would qualify these people to move into either Maintenance Helper (for day shift) or Maintenance II positions for the second and third shifts.

This training should be coupled with on-the-job experiences which would be gained by scheduling all trainees as maintenance helpers for a period of time before they move into maintenance II slots.

C. Supervisory Training

Line supervisors have not received any formal supervisory training. Such training could increase cooperation and communication between supervisors and between supervisors and workers. This would result in a more effective utilization of the workforce. Trainees would be present supervisors and/or people who have been identified as having valid supervisory potential. A second or third shift crew leader or supervisor should be considered for this training.

Training will consist of a two hour class per week for an eight week period. It will include the following curriculum:

1. Defining Responsibility: Definition of employee job responsibilities as they relate to supervisory duties.
2. Planning and Scheduling: Planning to determine the best method for accomplishment of departmental and company objectives. Scheduling to achieve the effective utilization of available manpower in order to meet those objectives.

3. Delegation and Follow-up: How to delegate effectively, give clear instructions and follow-up.

4. Evaluating the Work of Others: How to evaluate, set performance standards, build commitment and counsel employees.

5. How to Motivate and Handle Suggestions: How to understand the basic psychological and material needs of employees, including job satisfaction, praise, constructive criticism, and peer group acceptance.

6. How to Accomplish On-The-Job Training: The vast majority of training is conducted on the job. Therefore, it is important that the supervisor understand the basic concept of this training procedure.

D. Training For Operators

SIS proposes a short course of training for operators in the plant. This training would deal with the problem found with respect to the inability of many operators to properly turn and adjust valves. They would be shown how to perform this activity. However, since it is suspected that part of their problems in this area are motivational in nature some material would be included in this area to attempt to motivate them to a higher degree of cooperation than they are presently demonstrating.

Additionally, in this training segment stress would be placed on the importance of operators cooperating with maintenance men when repairs are necessary. Often oeprators are in a better position than the repairman when it comes to knowing which valves ought to be shut off to close down a given system of pipes. An operator due to his intimate knowledge of the valves with which he works might save a repairman from depending on a given valve to shut off a system when, in fact, the valve could not be fully shut off.

Because of the short duration of this proposed training SIS will waive the promotion of operators under the upgrading program.

E. Training For Clean-Up Personnel

SIS proposes to run a training track for all workers engaged in general clean-up activities. This training would consist of material relative to scheduling of time, assignment of priority to work, techniques and materials to be used.

Additionally, SIS proposes that one man each from the first and second shifts be upgraded to leadman. They would receive a raise in pay commensurate with their new responsibilities. These two men would be included in the training course for supervisors so that they would have the leadership skills necessary to perform their new duties.

Acceptance of this training by the company would lead to a cleaner physical plant. Removal of dirt and grease in many areas would increase the effectiveness of the safety program now in progress. Increased efficiency in this activity would have morale benefits throughout the plant.

RESPONSIBILITIES OF SIS AND COMPANY "X" AND PROGRAM IMPLEMENTATION

Should this proposal be accepted, SIS would:

1. Provide sufficient staff and outside personnel to complete common goals of SIS and Company "X".
2. If desired, assit the company in selection of trainees, interview and select potential candidates and submit recommendations for final class composition.
3. Develop curriculum and consult with management during the training phase.
4. Provide a training manual in each course, for each trainee, company trainer, and two copies for management.
5. Provide management with a progress report on each trainee prior to course completion.
6. Provide program follow-up on each trainee.

The Company Would:

1. Pay each trainee for time spent in training.
2. Make trainee available for all training sessions.
3. Provide the best available facilities for training.
4. Provide a graduation ceremony for those trainees who successfully complete the training program.
5. Promote trainees who have, in the company's judgment, shown significant improvement to a new level of responsibility with a salary increase commensurate with that level.
6. Provide SIS with periodic reports showing dates of promotion and new salaries of trainees promoted.

IMPLEMENTATION OF TRAINING PROGRAMS

All training programs will be conducted on the premises of Company "X". The training will be done by SIS staff and outside technical trainers arranged for by SIS. Each of the training courses will consist of one two-hour session per week. The total length of the training courses will vary.

Administration of Training

All of the training courses which the company agrees to take will have the following common characteristics:

1. The trainees will receive handouts for each session, highlighting the major points covered in that session. These handouts will then constitute training manuals which can be used by the company in the future.

2. The sessions will utilize a mixture of lectures, group discussions, role playing, and simulation to insure maximum trainee participation and a high degree of interest. Appropriate visual aids will also be designed to support the program, as required.

3. At the end of each session, and at the end of the program, each participant will complete an evaluation sheet designed both to measure the effectiveness of the session and to identify major needs of the trainees. By analyzing these sheets the instructor can go back and review any questionable areas or can provide for extra training as required. If problem areas are consistently sighted as major problems by a large segment of the group, the trainer will take appropriate action to accomplish the instructional goal which would otherwise not be met.

4. A Certificate of Achievement will be issued to each trainee upon successful completion.

NON-TRAINING RECOMMENDATIONS

For certain problems that cannot be solved by training, SIS recommends that:

1. Management clarify the requirements for the Maintenance I position and for the specialist category. To assist in the process, SIS is submitting model job descriptions to the company management.

2. Management review the test being used in connection with promotions into the Maintenance I category and the specialist category. If on review this test is discarded, workers should be notified of the decision. If on review the test is judged valid, the rational for its use should be made available to the workers concerned.

3. If recommendation 4 of the training recommendations (see Section B, Page 63) is approved, a system be implemented to utilize the maintenance trainees as part of two-man maintenance teams when the work-to-be-performed necessitates the use of a fully-qualified maintenance man and only a helper.

4. Management review its current practice of waiting until a machine totally breaks down before the maintenance staff is called in.

APPENDIX

SKILL INVENTORY - MAINTENANCE DEPARTMENT

	Welding	Light Electrical	Shop Math	Pipe Fitting
Taylor	Yes	No	No	No
Kitzmiller	Yes	No	No	No
Wilkins	No	Yes	No	No
Mosley	Yes	Yes	No	Yes
Brady	No	Yes	No	No
Miller	Yes	No	No	No
Payne	No	No	No	No
Sims	No	Yes	No	No
Walker	No (but does not need it)	Yes	No	No
Swaim	Yes	No	No	NO
Medley	Yes	Yes	No	Yes
Townsen	Yes	No	No	Yes
Clark	Yes	Yes	No	No
Lukens	Yes	Yes	No	No
Cown	Yes	No	No	No
Browne	Yes	Yes	No	No
Stoffer	No	No	No	No
Unger	No	No	No	No
Hampton	Yes	Yes	No	No

SECTION III — EMPLOYER TECHNICAL SERVICES
A PROGRAM MANUAL

EMPLOYER TECHNICAL SERVICES:

A PROGRAM MANUAL

This section contains a guide for the development and operation of a broad Employer Technical Services program. The suggested program approach is based on the experiences of the Skill Improvement Systems (SIS) program of the Ohio Bureau of Employment Services and the Industrial Training Services (ITS) program of the New Jersey State Department of Labor and Industry.

Much of the material offered in the following pages will be familiar to observers and operators of public manpower programs. State Employment Service officials will quickly recognize analytical and service approaches that are presently part of their agencies' program, although not necessarily contained in a single identifiable division. Only a few state agencies, however, have an in-plant training capability, and with the exception of the two aforementioned programs, there is little indication that any state has molded these capabilities into a comprehensive Employer Technical Services program designed both to ameliorate the work-related problems of the employed worker, assist employers in solving their manpower management problems, and improve the Employment Service image in the community.

The value of an industrial services program coupled with an effective employer contact approach has been advocated repeatedly in various Employment Service administrative letters such as GAL 1430 (April 1971), TESPL 2637 (May 1971) and TESPL 2651 (June 1972), and supported in such technical manuals as *Developing Your Manpower* and the *Industrial Services Handbook.* State ES Administrators indicate, however, that requests for increased staffing and financial resources to expand or improve activities not directly applicant related are given short shrift during budget and Plan of Service reviews by regional and federal officials. This manual offers no solutions to these funding problems. Both the Ohio and New Jersey projects were begun with special funding above the states' regular allocations, but efforts to be included in the annual Plan of Service have proved unsuccessful.

State Employment Services wishing to establish the type of program outlined in this manual may want to consider the development of a proposal requesting additional funds, but during the current period of belt tightening in all federally funded areas, there is little reason to believe that additional money will be available. Therefore, this report advocates that efforts be made to build an effective Employer Technical Services program by refocusing existing agency programs (such as traditional Occupational Analysis and Industrial Services and the testing program, Employer Relations efforts and public relations activities) which may not be returning the expected benefits in terms of openings, placements and employer loyalty.

It may appear to some that a government program emphasizing service to employers and the problems of the employed worker at this time of high unemployment is unjustified and that manpower policies should swing back to the need to reduce frictional unemployment. However, there is no conflict between these two issues. Making the workplace more tolerable and improving the potentials of workers and their supervisors reduces the possibility that a worker will voluntarily leave his job or be fired unnecessarily. Serving the employer and his workforce, therefore, addresses some of the causes of frictional unemployment rather than the symptoms that have historically been treated through labor exchange techniques. While the Newark and Columbus experiences do not yet provide a full picture of the potentials of an Employer Technical Services program, there is reason to advocate that State Employment Service officials carefully review the material presented here and consider its potential for enriching the employer contact program.

Provided in this manual is a detailed, nontechnical description of the program components and development process. In preparing a program manual for a public manpower program as diverse as the State Employment Service system, it was necessary to walk a thin line between making the approach too rigid -- thereby restricting its use to only a few localities or situations, or too flexible -- making it of little use in program design and implementation. The following pages contain:

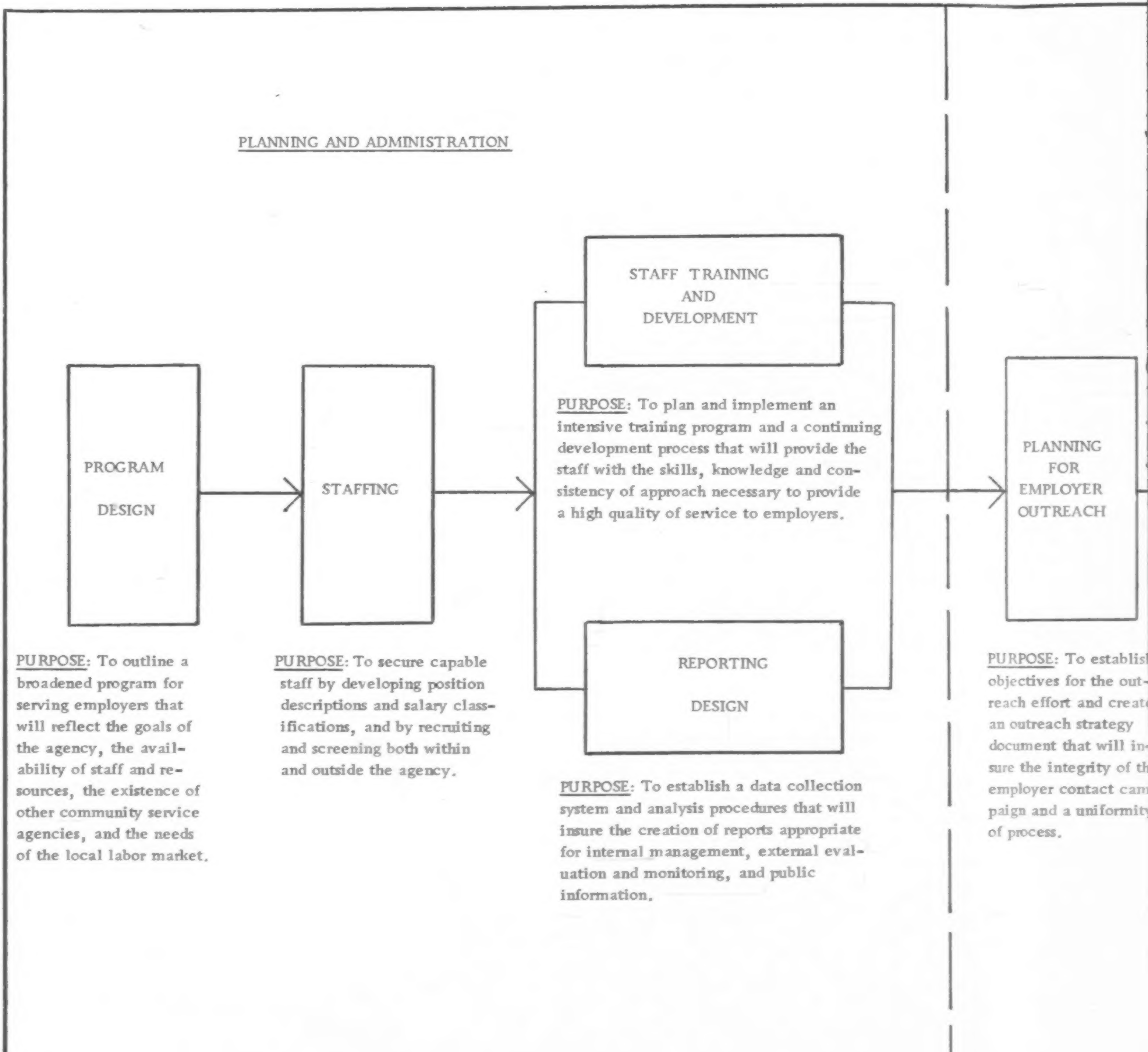
-- A description of the program planning process and initial administrative procedures;

-- A description of the design and implementation of an employer outreach process appropriate for a technical services program;

-- A description of an in-plant intervention system designed to assist employers in identifying and solving their manpower management problems;

-- Appendices providing references to technical resource documents and materials available for use in the analysis and technical assistance phases of program operation.

The approach outlined here is not intended to be a rigid model. State ES officials wishing to install an Employer Technical Services program will have to mold the design to conform to agency and local labor market needs. While it is recognized that few localities will be able to use the material exactly as presented, it is suggested that all ES officials in all the States review the techniques presented here and select, modify and test those aspects which seem relevant to their own needs.


PLANNING AND ADMINISTRATION
PROGRAM DESIGN
STAFFING
STAFF TRAINING AND DEVELOPMENT
REPORTING DESIGN
PLANNING FOR EMPLOYER OUTREACH

PURPOSE: To outline a broadened program for serving employers that will reflect the goals of the agency, the availability of staff and resources, the existence of other community service agencies, and the needs of the local labor market.

PURPOSE: To secure capable staff by developing position descriptions and salary classifications, and by recruiting and screening both within and outside the agency.

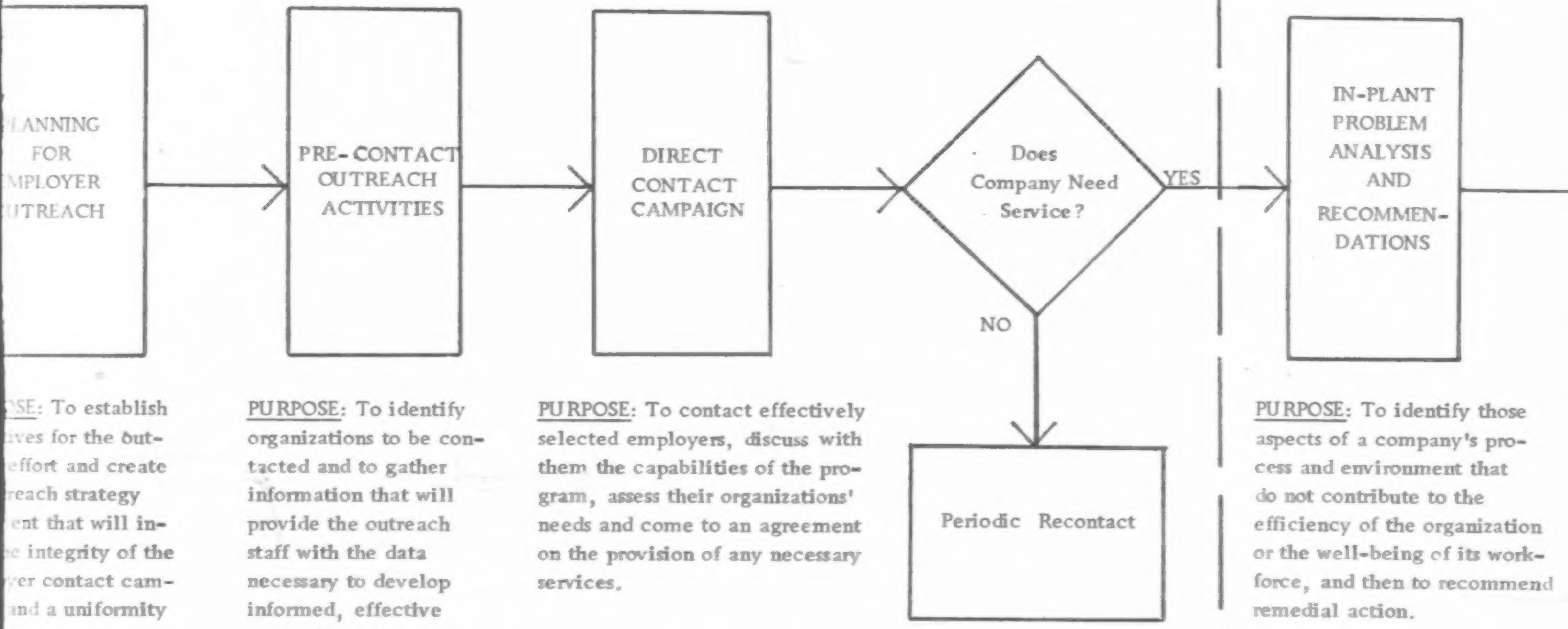
PURPOSE: To plan and implement an intensive training program and a continuing development process that will provide the staff with the skills, knowledge and consistency of approach necessary to provide a high quality of service to employers.

PURPOSE: To establish a data collection system and analysis procedures that will insure the creation of reports appropriate for internal management, external evaluation and monitoring, and public information.

PURPOSE: To establis
objectives for the out-
reach effort and creat
an outreach strategy
document that will in-
sure the integrity of th
employer contact cam
paign and a uniformit
of process.

EMPLOYER TECHNICAL SERVICES PROGRAM

EMPLOYER OUTREACH


LANNING
FOR
MPLOYER
UTREACH
PRE-CONTACT
OUTREACH
ACTIVITIES
DIRECT
CONTACT
CAMPAIGN
Does
Company Need
Service?
YES
NO
Periodic Recontact
IN-PLANT
PROBLEM
ANALYSIS
AND
RECOMMEN-
DATIONS

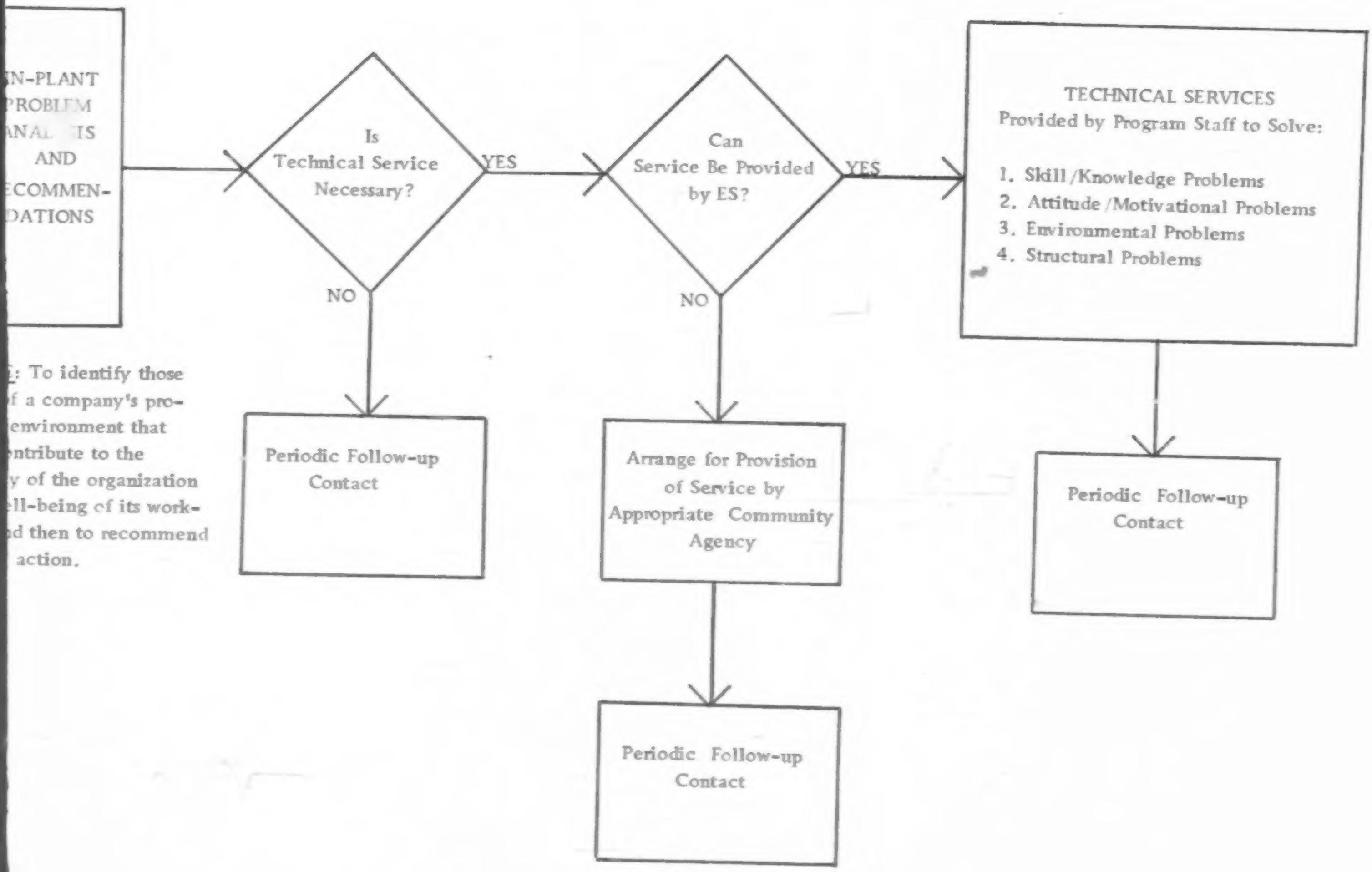
OSE: To establish ives for the out- effort and create reach strategy ent that will in- e integrity of the yer contact cam- and a uniformity ess.

PURPOSE: To identify organizations to be contacted and to gather information that will provide the outreach staff with the data necessary to develop informed, effective marketing presentations geared to the specific needs of potential clients.

PURPOSE: To contact effectively selected employers, discuss with them the capabilities of the program, assess their organizations' needs and come to an agreement on the provision of any necessary services.

PURPOSE: To identify those aspects of a company's process and environment that do not contribute to the efficiency of the organization or the well-being of its workforce, and then to recommend remedial action.

SERVICES


N-PLANT
PROBLEM
ANALYSIS
AND
ECOMMEN-
DATIONS
Is
Technical Service
Necessary?
YES
NO
Can
Service Be Provided
by ES?
YES
NO
TECHNICAL SERVICES
Provided by Program Staff to Solve:
1. Skill/Knowledge Problems
2. Attitude/Motivational Problems
3. Environmental Problems
4. Structural Problems
Periodic Follow-up Contact
Arrange for Provision of Service by Appropriate Community Agency
Periodic Follow-up Contact
Periodic Follow-up Contact

: To identify those
f a company's pro-
environment that
ntribute to the
y of the organization
ell-being of its work-
d then to recommend
action.

Planning and Administration

PLANNING AND ADMINISTRATION

Building upon the present capabilities and programs of the agency and those of cooperating community manpower organizations, a State Employment Service can develop a responsive Employer Technical Services program by:

- *Planning a program within the context of the local labor market, to solve employers' manpower-related problems;*
- *Identifying and recruiting a staff capable of implementing the plan;*
- *Designing and implementing a staff training and development program;*
- *Designing a system for reporting information on program impact and accomplishments.*

PLANNING AND ADMINISTRATION

During the past 12 years the State Employment Service system has been asked to assume responsibility for a mulplicity of new programs designed to solve complex social problems. The federal guidelines for these programs often have not recognized the operational and procedural problems that must be solved before the programs can be installed. The process of translating federal or state requirements into operating procedures has often floundered because insufficient time was made available for addressing administrative and planning issues. Inadequate planning can exacerbate the overlapping of organizational structure and duplication of effort which have long plagued the nation's manpower program.

The general planning and administrative approach advocated in this section is designed to facilitate the development of an Employer Technical Services program. It is recognized that each agency already has standard planning, reporting, staffing and staff development procedures which satisfy the needs of the organization, and that the procedures suggested here will require modification to conform to standard agency practices.

The following four phases of pre-operational activity are suggested. The heavy emphasis on planning and staff development is based on needs demonstrated by the Skill Improvement Systems program:

- -- Program Design: Research and analysis of local needs and agency capabilities; establishment of program goals; and development of a Program Plan of Action.
- -- Staffing: Creation of position descriptions followed by recruitment and selection of appropriate staff.
- -- Staff Training and Development: A program to provide staff with the requisite skills and knowledge.
- -- Reporting: An outline for an information gathering, analysis and dissemination system.

PROGRAM DESIGN

Purpose: *To outline a broadened program for serving employers which will reflect the goals of the agency, the availability of staff and resources, the existence of other community service agencies, and the needs of the local labor market.*

Overview

While the major objectives of all State Employment Services are similar, there are significant differences among the states in administrative procedures, management styles and program structure. These differences have developed because of variations in individual state administrative systems, the needs of the local labor markets and most importantly, the talents and personalities of the agency's staff. If an Employer Technical Services program is to maximize the use of available capabilities in focusing on both current and future organizational needs, a careful and intensive research and planning effort must precede any operational activity. This program design phase is intended to insure a complete identification of local labor market problems, agency capabilities and constraints and, finally, the availability of service resources outside the SES. Out of this research and analysis should evolve a planning document that will provide data for informed decision-making on staffing requirements, staff development activities, employer outreach strategy and technical service packages.

Data Collection and Analysis

The first step in identifying those key factors necessary for effective program design is an information gathering effort. This data collection and the ensuing analysis can provide the basis for making decisions on the geographic location of the program* and the appropriate mix of services to respond to local labor market and agency needs. The major areas of reason in the planning effort, fully detailed in Table 1, include:

- -- Labor Market Information (Table 1.1)
- -- Community Services (Table 1.2)
- -- The Present Employer Contact Program (Table 1.3)
- -- Literature Review (Table 1.4)

It is recognized that no one agency will find it necessary to collect all the data outlined here. The research activities should be restricted to those areas that experience and common sense indicate will be useful to the design and review process.

Program Plan of Action

Once the initial research and analysis has been completed, the next step is the creation of an action oriented document detailing a program design compatible with planned or existing agency functions. It is essential in this process that decisions be made with the full participation of appropriate management and operational officials. In this way, the experience and knowledge of agency personnel is tapped but, more importantly, through this review process program acceptance among agency staff can be achieved. A suggested design and review process for the program Plan of Action includes the following tasks:

- Appointment of Planning Coordinator

  A person, familiar with the agency and experienced in the planning of manpower programs should be selected to coordinate the design process. By identifying a single individual to lead the effort, a consistency of approach and a continuity of effort is assured.

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* The experiences of the ITS and SIS programs indicate that the geographic boundaries for a technical service program should encompass an economic district, an SMSA, or the entire state. Both the New Jersey and Ohio programs, while designed to serve a particular SMSA, reported directly to agency headquarters rather than to a local or district office.

TABLE 1.1 - LABOR MARKET SURVEY

Purpose: *To identify those segments of the employed labor force, business community and government establishment which have an apparent need for assistance in solving manpower related problems.*

INFORMATION AREA	OBJECTIVES OF SURVEY	SURVEY CONTENT	MAJOR SOURCES
1. Labor Force Data	To identify those segments of the working population that have apparent need for manpower services.	Analysis of workforce by occupational distribution, geographic location, demographic characteristics, poverty status, educational background.	Bureau of Labor Statistics, Census Bureau, ESARS, UI UC, civil rights compliance agencies.
2. Industrial Configuration	To analyze the composition of the local business community.	Analysis of industry by SIC code, number of workers, salary levels, principal products, size of firm, turnover rates, skill needs, geographic location.	Bureau of Labor Statistics, Census Data, ESARS, UI-UC, Employer Associations, Chamber of Commerce, Economic Development Agencies.
3. Economic Trend Survey	To identify those segments of the local economy that might require assistance because of contraction, growth, changes in technology, etc.	Analysis of local economy by changes in industrial and service mix, significant past and present growth of major firms, outlook for future growth.	Chamber of Commerce, Economic Development Agencies, Growth Associations, NAB Chapters.
4. Skill Need Survey	To identify those areas of occupational growth that might require the application of training or other manpower services.	Analysis of future skill needs by industry, occupation, salary level and job requirements.	Area Skill Surveys, BLS's Tomorrow's Manpower Needs, employer organizations, ESARS, MODS and Job Bank.

TABLE 1.2 - COMMUNITY SERVICES SURVEY

Purpose: To identify the goals, client groups and capabilities of community manpower and social service agencies that might assist the Employer Technical Services program in the employer contact process and the provision of services.

INFORMATION AREA	OBJECTIVES OF SURVEY	SURVEY CONTENT	MAJOR SOURCES
1. Manpower Development and Training Survey	To identify resources that might be drawn upon to develop service packages for employers; to uncover gaps in local service capabilities.	List of all agencies involved in any aspect of manpower development and training, their goals, client groups and capabilities.	CAMPS, Community Action Agencies, Chamber of Commerce, Board of Education, Regional DOL Office, MDTA Skill Center.
2. Economic Development Organizations	To identify potential allies who might ease the way into those plants either expanding or considering leaving the area.	List of all local or area economic development agencies, their program approaches and resources.	Governor's Office, CAMPS, Chamber of Commerce, Mayor's Office, Employer and Industry Associations.
3. Public Welfare Organizations	To identify those public agencies concerned with problems of the low wage earner.	List of all organizations involved in providing income maintenance and social services to the poor.	State Bureau of the Budget, Governor's Office, Mayor's Office, CAMPS, State Welfare Agency.
4. Community Development/ Action Organizations	To identify those agencies that might be aware of low wage earners and whose activities might pressure employers into action.	List of all organizations involved in helping the poor through social services and community organization techniques.	OEO and HUD Regional Office, BOB, Mayor's Office, Local CAP Grantee, Model Cities Agency.
5. Human Rights Organizations	To identify those public and private agencies that may be pressuring firms to improve the occupational situation of minority groups.	List of all agencies, local, state and federal, concerned with equity of opportunity for all workers.	OEO, EEOC, OFCC, State BOB, Governor's Office, Mayor's Office.
6. Educational Institutions	To identify possible service capabilities that might be useful in program development.	List of all local educational institutions concerned with adult vocational and technical training.	Board of Education, Board of Regents, State BOB.

TABLE 1.3 - PRESENT SES EMPLOYER CONTACT PROGRAM SURVEY

Purpose: To identify the goals and techniques of all SES units with employer contact responsibilities in order to insure the development of an integrated and effective outreach approach for the Employer Technical Services Program.

INFORMATION AREA	OBJECTIVES OF SURVEY	SURVEY CONTENT	MAJOR SOURCES
1. Employer Relations/ Public Relations Program	To assure coordination with other employer contact functions and the agency image building program.	List of all SES units with an employer contact function, the unit's goals and the name of the unit chief.	SES Director, SES Business Director.
2. Industrial Services Program	To identify those aspects of the OAIS program that might be linked to or merged with an Employer Technical Services Program.	Description of the present OAIS activity including recent work accomplished and statement of capabilities.	SES Director, OAIS Director.
3. Civil Rights Compliance Program	To tap the knowledge, needs and contacts of the SES unit concerned with human rights of workers.	A description of scope and nature of the SES compliance activities and the name of the unit chief.	SES Director, Compliance Unit Chief.
4. Applicant Service Programs	To gain an understanding of the employer contact aspects of the placement process.	Description of major goals and processes of the applicant services program.	SES Director, local office manager.
5. MDTA Contract Development and Service Program	To tap the knowledge of the MDTA contract staff on the need for in-plant training in the community.	Description of the MDTA contract service program, including listings of present OJT and other manpower training contracts.	SES Director, MDTA Contract Unit Chief.

TABLE 1.4 - LITERATURE REVIEW

Purpose: *To review relevant Employment Service policies and guidelines, as well as special program reports and materials for use in designing the Employer Technical Services program.*

INFORMATION AREA	OBJECTIVES OF SURVEY	SURVEY CONTENT	MAJOR SOURCES
1. Federal, State and Local Guidelines	To insure compliance with all regulations and to identify those areas of administrative constraints that might have to be overcome.	A collection of all ES regulations, TESPL's, GAL's, FM's and local procedures which might have an impact on program operations.	Federal, state and local manuals.
2. Experimental and Demonstration Programs	To draw upon the experience of others in the development of the Employer Technical Services program service model.	A file of reports of research and demonstration projects in the area of services to the employed.	DOL Office of Research and Demonstration, the National Clearinghouse for Scientific and Technical Information.
3. Newark Industrial Training Services and Columbus Skill Improvement Systems	To draw upon the operational experiences of those programs that have achieved some success in this area.	A collection of relevant materials from the two operational technical services programs.	SIS and ITS Project Directors.

- Development and Review of a Concept Paper

Under the direction of the design leader, a short concept paper should be prepared, proposing the program's rationale, goals, operating methods and relationship to other agency activities. The paper should then be distributed to appropriate agency officials for comment and modification. These officials should be encouraged to offer substantive criticism concerning the integrity of design and the focus of the program.

- Writing a Program Plan of Action

Once the opinions of agency staff have been secured, a draft of the Plan of Action may be prepared. This document, which should reflect the insights provided by the research effort and the suggestions of agency officials, will serve as a blueprint for program implementation. The structure and content of the document will be molded by the needs and capabilities of each SES. Below is a brief outline suggested for the Plan of Action. (The material presented throughout the Program Manual should be used to answer the questions under each topic.)

I. Background and Rationale:

1. What types of employer technical services are presently offered by the agency?
2. What is the present level of staffing and funding of these activities?
3. Are these activities achieving the desired results?
4. Why is the agency considering an expanded technical service program?

II. Identification of Program Goals:

1. How will the program benefit the agency? The employed worker? The client organization?
2. Can the goals be stated in quantitative terms?
    -- Number of trainees?
    -- Number of increased placements?
    -- Number of new SES users?

III. Employer Outreach Approach:

1. How will employers be made aware of the services of this program?
2. How will this outreach effort be coordinated with other SES employer contact programs?

3. Who will be empowered to commit the program to a service project?
4. Who will be responsible for monitoring the marketing effort?

IV. Types of Services to be Offered:

1. Will in-depth problem analysis be provided?
   - What will be the scope of the analysis?
   - What will be the general research approach?
2. What types of training will be offered?
   - Skills training?
   - Supervisory training?
   - Other?
3. What types of services will be provided by community agencies?
4. How will the full service capabilities of the SES be utilized in this program?

V. Data Collection System:

1. What types of data will be collected on program outcomes and impacts?
2. How will this data be collected, analyzed and reported?
3. How will these procedures be integrated into the agency's regular reporting system?

VI. Staffing Plan:

1. How many professional and clerical staff memebers will be required?
2. What are the major job classifications?
3. What are the expected personnel sources?

VII. Staff Development Plan:

1. How will the initial staff training be accomplished?
   - Who will be responsible?
   - What will the content of the training be?
   - How will the training be evaluated?

VIII. Funding Arrangements:

1. What internal monetary resources are available for this program?
2. What additional funds might be available?

IX. Timetable for Developmental Activities

1. When will the monies be available?
2. When will the staff be hired?
3. When will the employer contact program begin?
4. When will the first service program begin?
5. When will the staff be fully occupied?
6. When will the first program evaluation take place?

- Review of Program Plan of Action

The draft document should be distributed throughout the agency for comment and modification. It is particularly important, at this draft stage, to evoke the opinions and feelings of those officials who head SES units that will interface with the proposed program. Because the structure of the Employer Technical Services program may overlap existing program areas, it is necessary to clear away possible misunderstandings which, if left to fester, may develop into organizational conflicts. Once the comments of interested staff members have been secured, the Plan of Action should be formalized and submitted to the agency administrator for final approval. The format of the Plan of Action should be consistent with that used in the agency's Plan of Service.

STAFFING THE PROGRAM

Purpose: To secure capable staff by developing position descriptions and salary classifications, and by recruiting and screening both within and outside the agency.

Overview

As with any service organization, the capabilities and quality of the staff will be the prime determinant of the effectiveness of the Employer Technical Services program. Since initial staffing decisions, particularly in a civil service environment, often have long term impacts on program operations, great care and consideration must be given to the process of creating position descriptions, recruiting and selecting the program staff.

The process of accomplishing these staffing tasks will be molded by the requirements of the program as outlined in the Plan of Action and, of course, by the constraints imposed by the state and agency personnel systems. An Employer Technical Services program requires a staff with an ability to respond to manpower problems in varying contexts. In staffing an ETS program, the agency should make maximum use of the flexibility provided by personnel procedures both in terms of salary classifications, position requirements and selection criteria. The material provided below outlines the major tasks to be accomplished in the orderly acquisition of capable personnel.

Selecting a Program Director

It is desirable to bring the person who will ultimately direct the program into the process at the first opportunity, perhaps initially as a consultant. An agency may be able to recruit a person from within the SES staff. With most of the analytical and administrative skills necessary to carry out the program . However, it may be necessary to recruit from outside in order to bring into the program a Director possessing strong industrial management, analysis and/or training skills, whose background will impress and evoke the confidence of the employer community.

Position Descriptions and Salary Classification Scheme

With the assistance of the Program Director, the next step is the development and review of position description statements and salary classification guidelines. These position descriptions will reflect the staffing pattern established in the Plan of Action. Below are some typical position descriptions for an Employer Technical Services program, based on the SIS and ITS examples:

-- Program Director: Plans, designs, implements and coordinates in-plant service projects in accordance with guidelines and regulations of the SES and the U.S. Department of Labor. Interprets policy and supervises the work of the staff in the development and effective implementation of a wide variety of programs providing skill and non-skill training, remedial education, and management consulting services to employers, consistent with the needs of their employees. Prepares reports reflecting activities and impact of program operations.

-- Operations Supervisor: Under the direction of the Program Director oversees the identification of potential in-plant programs, supervises the execution of in-plant analysis activities, monitors the development of curricula and the provision of training services, and follows-up all service activity to insure compliance with SES policies and the provision of quality services.

-- Marketing Specialist: Under the direction of the Operations Supervisor and in accordance with the employer outreach strategy, identifies and contacts employers in need of the program's services to solicit their cooperation in establishing in-plant programs. Explains benefits of the program, outlines analytical steps and explains employer requirements for participation. When in-plant analysis has been completed, may assist in the negotiation of a service program for the company. May supervise a marketing team in early stages of the program.

-- Analyst/Trainer: Under the direction of the Operations Supervisor, makes studies of employer establishments, noting manpower-related problems. Conducts in-plant surveys, describing the nature and causes of problems and recommends avenues of remediation. With the assistance of the Operations Supervisor and/or Marketing Specialist, negotiates technical assistance package with employer. In accordance with the needs of a company, prepares training curriculum and materials and, if required, administers training program including both classroom and on-the-job training.

The salaries for these positions will of course depend on the salary structures of the particular SES. In both the SIS and ITS programs it was necessary to modify the salary classification system in order to hire staff with the required qualifications.

Recruitment and Screening

Once the position descriptions and salary classification schemes have been approved, recruitment should begin. The Director should be the first hired and should participate in the recruitment and selection process to insure the acquisition of a compatible and cooperative staff.

Personnel sources for this recruitment will depend largely on the requirements dictated in the Plan of Action. The optimum staff would include a mix of persons drawn from both within and outside the agency with backgrounds in industry and government, a demonstrated ability to communicate, and some experience in management analysis, industrial training or the public manpower program. Those states with well developed OAIS programs may wish to draw some or all personnel from that unit into the project. Employer Relations and MDTA Contract Representatives who have had significant employer contact experience can also be valuable additions to the staff, although serious consideration should be given to drawing at least a portion of the staff from outside the agency to inject different perspectives and experiences into the program.

Staff hiring should be completed rapidly enough so that virtually all the staff is available for participation in the initial staff training activities.

STAFF TRAINING AND DEVELOPMENT

Purpose: *To plan and implement an intensive training program and a continuing development process that will provide the staff with the skills, knowledge and consistency of approach necessary to provide a high quality of service to employers.*

Overview

A carefully planned training program should be conducted for the staff prior to any significant operational activities. The service package proposed in the Plan of Action should be examined to determine what skills and knowledge the staff should possess. Once these requirements have been determined, the experience, background and education of the staff members should be inventoried and matched against the requirements to establish a training needs listing and curriculum outline. Because the staff will be confronted with different problems in varied contexts during their participation in program operations, it is impossible to prepare them for all eventualities during the initial training. Therefore, a continuing process of individual and overall staff development must be established and maintained.

Outlined below is a suggested process for designing and implementing a comprehensive staff training and development program. It is intended only as a guide -- not as a curriculum outline -- and should be modified to meet the particular needs of a project staff. The material is organized into basic skill and knowledge areas that seem to have practicability for the staff of an in-plant service program. As with the training that will be performed for client companies, the quality of the curriculum, the effectiveness of the training materials, and the selection of training techniques will be critical to the success of the program.

The tasks involved in effecting a staff development program follow the generally accepted procedures for training program design and include:

-- Appointment of a training coordinator

-- Curriculum development

-- Identification of training resources

-- Scheduling, implementation and evaluation of the training

-- Planning for on-going staff development

Appointment of a Training Coordinator

The first task in the design and implementation of the training program is the appointment of a training coordinator. This person may be the Project Director, a staff member, the SES training director, or any other person having the necessary training expertise. The coordinator should oversee the design of curriculum, the scheduling of training, the collection of necessary training materials, and arrangements for field visits. In addition, preparation should be made to enlist qualified lecturers and trainers to present appropriate portions of the curriculum.

Curriculum Development

The following steps are necessary to develop a comprehensive curriculum responsive to the needs of the staff and supportive of the project operations:

- Training Needs Analysis

  A training needs analysis should be undertaken by the coordinator to determine first, the requisite skill needs (what the staff should be able to *do*) and background information (what they should *know*), and secondly, what levels of skill and relevant knowledge are already possessed by the staff. The training needs can be identified through an analysis of the skills required to successfully execute the Plan of Action. A review of the experience and educational backgrounds of the staff, using a skill inventory technique such as the one shown in Figure 1, can assist in focusing the training on actual needs.

- Curriculum Outline

  The insights provided by the training needs analysis should be reflected in the curriculum outline. The Curriculum Guides presented in Tables 2 and 3, p. 25-37.

FIGURE 1

SKILL INVENTORY

Mary Montell

JOB TITLE	ENTRY	LENGTH OF TIME	WHERE - WHEN	MACHINES USED	TOOLS USED
Legal Secretary	No	3 Years	Workmen's Compensation Board 1939 - 1940	Typewriter	
Claims Specialist	No	4 Years	Law Office 1940 - 1943		
Consultant Workmen's Compensation	No	10 Years	Part Time 1943 - 1953		
Director CAP Agency Outpost	No	2 Years	CMACAO Columbus, Ohio 1965 - 1967		
Structured program, trained staff in community organization, identified community resources for health, welfare, housing, employment. Assisted in staff development, evaluation of program, internal management system administration.					
Director of Counsellors	No	1 Year	New Careers 1967 - 1968		
Administration: supervised trainee-counsellors with BES through New Careers.					
Health Coordinator	No	3 Years	CMACAO 1968 - 1971		
Community organization, supervision of staff program development, internal management system, contact with and conduct meetings with directors of community services agencies. Wrote proposals and budgets for senior citizens, meighborhood health centers, outreach training program, alcoholism. Developed alcoholism program for social service agencies. Developed brochure for alccholism program. Wrote manual for supervisors (middle management) in industry for the employee with drinking problem. Helped plan training program for national seminar. Conducted staff training program, assisted in CAP organization restructuring and evaluation.					

are intended to provide an overview of the skill and knowledge areas basic to an Employer Technical Services program. These lengthy and detailed Curriculum Guides are based on the analysis of program requirements and staff capabilities in the ITS and SIS projects. An effort was made in developing these Guides to be as inclusive as possible; consequently, they must be tailored to meet the particular needs of the proposed program. For example, a staff drawn largely from experienced SES personnel will not require background information on the agency, its priorities and program structures. Or, if the staff is taken primarily from the OAIS program, little emphasis on occupational analysis, problem solving skills or industrial processes will be required. The Curriculum Guides are organized as follows:

-- Table 2: Knowledge Guide (What the staff needs to know)
  2.1: Overview of the Public Manpower Program
  2.2: Manpower-Related Issues
  2.3: The Total Work Environment
  2.4: Basic Steps in Program Operation
-- Table 3: Skills Guide (What the staff must be able to do)
  3.1: Communication Skills
  3.2: Analytical and Problem-Solving Skills
  3.3: Training Skills

The Knowledge Guide contains suggestions for curriculum content and sources for information or materials. The Skills Guide presents objectives for the training, suggests training techniques and lists sources for materials.

- The Pre/Post Test

After the curriculum has been outlined, a training evaluation instrument can be developed to test the staff at the outset of the program (pre-test) and again upon completion of training (post-test) so that the skills and knowledge gained through the training can be measured. Several mechanisms such as self-evaluation questionnaires, problem-solving exercises or oral presentations might be employed. This pre/post testing approach, while basic to evaluating the effectiveness of training, is not essential to a successful program. However, it does serve some useful purposes:

-- The pre-test provides the coordinator with an indication of what to emphasize and what to gloss over in the training.

-- The post-test helps the coordinator keep the training on target and identify what has been assimilated by the staff.

-- The pre/post test provides the staff trainees with "visable proof" of the learning that has taken place thereby building self-confidence.

Identification of Training Resources and Securing of Materials

Arrangements should be made for enlisting trainers and lecturers, acquiring the requisite training materials and choosing appropriate training techniques to support the curriculum. The Skills and Knowledge Guides suggest general sources for instructors, materials, and techniques. Below are some general suggestions for identifying training resources and securing materials:

-- Many potential trainers can be found within the SES. The agency training director can be an important resource both in terms of providing actual training and identifying personnel within and outside the ES who can satisfy specific instructional needs.

-- Training materials are generally available within the agency and, once again, the ES training director can be of assistance in identifying and securing manuals, books and reports. In addition, the *USTES Employer Services Training Resource** contains useful guides and training exercises.

-- Training techniques can vary from formal classroom discussions to site visits and problem solving exercises. Whenever possible the training should be participative and include field visits to local training centers, plant tours, and observation of all Employment Service activities. Perhaps the most valuable training activity would be a visit to SIS in Columbus and ITS in Newark. The opportunity to observe the operations of a successful Employer Technical

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* *USTES Employer Services Training Resource* , Master Guide and Trainee Materials. U.S. Department of Labor, Manpower Administration, Washington, D.C., April 1972.

Services project can provide a context in which to understand the classroom presentations.

Scheduling, Implementing and Evaluating the Training Program

When all resources have been secured, the actual training may be scheduled and conducted. In this process, the following items should be considered:

- -- Securing a comfortable, well-equipped room for the classroom training;
- -- Establishment of a realistic and varied training schedule, with allowances for rest periods and with sufficient flexibility to accommodate normal slippage. For example, lectures should be interspersed with active exercises, and field trips scheduled to separate intense classroom sessions;
- -- Posting the schedule at least a day in advance so the staff will know what is planned and can make any necessary preparations;
- -- Having all materials and equipment ready at the beginning of each day's session.

Upon completion of the training program, an evaluation should be performed using pre/post test data.

On-Going Staff Development

A regular program for staff development and in-service training should be established to fill those gaps identified by the evaluation and to respond to new skill and knowledge needs that materialize as the project develops. Staff development activities need not be restricted to training and may include:

- -- The creation and maintenance of a library to provide resource material and information for the staff on topics related to the work of the program;
- -- Regular staff meetings and structured discussions to insure feedback on project findings, formalize the exchange of information among the staff, and provide a forum for discussion of key issues;

-- Lectures and seminars conducted by local experts on issues of interest to the staff;

-- Staff participation in continuing education or tuition refund programs offered by the agency;

-- A job rotation system to provide the staff with an opportunity to experience all aspects of program operation. In this process each person samples the various program tasks and then, if appropriate, selects the area of program operation for which he feels best suited. In addition, this cross-training enables the staff to respond flexibly to crises and shifts in program emphasis;

-- Staff participation in professional conferences, workshops, or community activities.

CURRICULUM GUIDE: KNOWLEDGE

TABLE 2.1

OVERVIEW OF THE PUBLIC MANPOWER PROGRAM

Purpose: To provide the staff with a broad background in national and local manpower programs and problems in order to improve their understanding of the role of an Employer Technical Services program as part of the total manpower process; to enable them to work effectively with all other divisions of the State ES; and to enable them to carry on informed conversations with employers on all aspects of the public manpower program.

CURRICULUM CONTENT	INFORMATION SOURCES
The Federal Manpower Development Program -- The Manpower Development and Training Act of 1962 and subsequent amendments; -- Institutional skills training - the Skills Center approach; -- On-the-Job Training (OJT); Neighborhood Youth CORPS (NYC); NAB JOBS '70; Concentrated Employment Program (CEP); Public Employment Program (PEP).	Materials: -- Copies of Legislation: the 1962 Manpower Development and Training Act and 1968 Amendments -- Annual Manpower Report of the President, 1966 to present -- TR 903 Series* -- TR 904 Series -- Mangum, Garth L., MDTA, The Foundation of Federal Manpower Policy. Baltimore: Johns Hopkins University Press, 1968. -- Levitan, Sar and Garth Mangum, Federal Training and Work Programs in the Sixties. Ann Arbor: Institute of Labor and Industrial Relations, University of Michigan, 1969. Contacts: -- SES Manpower Development Coordinator -- SES Research Director -- State and Local CAMPS Director -- Manpower Specialists from Local Universities and Colleges

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* USTES Employer Services Training Resource, prepared by Ergonomics, Inc. for the U.S. Dept. of Labor, February, 1971. This document, which has been distributed to all State Employment Services, will be referred to throughout these guides as TR followed by the appropriate series number.

TABLE 2.1, continued

CURRICULUM GUIDE: KNOWLEDGE

OVERVIEW OF THE PUBLIC MANPOWER PROGRAM, cont.

CURRICULUM CONTENT	INFORMATION SOURCES
The United States Employment Service and the State Employment Service Program -- History of USES; Wagner-Peyser Act; -- Current USES goals and programs; -- Goals and policies; organization; operations (placement process, research and analysis, special services).	Materials: -- TR 901 Series -- Adams, Leonard P., The Public Employment Service in Transition, 1933-1968. Ithaca: New York State School of Industrial and Labor Relations, Cornell University, 1969. -- Haber, William and Daniel H. Kauger, The Role of the US Employment Service in a Changing Economy. Kalamazoo, Michigan: The Upjohn Institute for Employment Research, 1964. Contacts: -- SES Training Director -- SES Administrator -- DOL Regional Office Staff
Your State Employment Service -- State ES goals and policies; -- SES Organization; -- SES Operations (placement process, research and analysis and special services); -- Human resource development activities.	Materials: -- Plan of Service and SES Budget -- SES standard operating procedures, manuals, and appropriate administrative memos and letters -- Special studies, evaluations, and research materials Contacts: -- SES Training Division -- Division Directors -- SES Administrator -- State Governor

TABLE 2.1, continued

OVERVIEW OF THE PUBLIC MANPOWER PROGRAM, cont.

CURRICULUM CONTENT	INFORMATION SOURCES
Other State and Local Manpower Agencies and Programs -- NAB Chapter; -- Concentrated Employment Program; -- Opportunity Industrialization Center; -- Board of Education; -- City and State CAMPS Council; -- City and State Dept. of Human Resources	Materials: -- Annual CAMPS Plan -- State and municipal budget documents -- Individual agency publicity materials Contacts: -- CAMPS Director -- Local Project Directors -- SES Training Director
Federally Supported Experimental Research and Demonstration Projects -- Purpose of R & D; -- Descriptions and findings of R & D programs supported by DOL in this program area; -- Types of materials developed and how to obtain them;	Materials: -- Manpower Research and Development Projects, (annual editions for last 6 years) U.S. Dept. of Labor. -- Management Practice and Research, National Technical Information Service, Weekly Government and Abstracts, U.S. Dept. of Commerce. -- Research & Demonstration Projects: Industrial Training Services, 1100 Raymond Blvd., Newark, New Jersey; Skill Improvement Systems, 315 South 4th Street, Columbus, Ohio 43216; Humanic Designs Corp., 1615 Northern Blvd., Manhasset, N.Y. 11030; New Careers Systems Institute, 8 Sicard Street, New Brunswick, N.J. 08901; Training Incentive Payments Program, Institute of Public Administration, 55 West 44th Street, N.Y. 10036. Contacts: -- Dept. of Labor, Office of Research and Demonstration, Utilization Division Director

CURRICULUM GUIDE: KNOWLEDGE

TABLE 2.2

OVERVIEW OF MANPOWER-RELATED ISSUES

Purpose: To acquaint staff with the myriad of programs, organizations and laws affecting the nation's workforce and the business community, in order to broaden their outlook and improve their understanding of their role in the manpower program.

CURRICULUM CONTENT	INFORMATION SOURCE
Civil Rights Laws and Enforcement Agencies -- Federal and state civil rights legislation, particularly concerning employment of minority group members and women; -- Office of Federal Contract Compliance, DOL: purpose, powers, and method of operation; -- Equal Employment Opportunity Commission: purpose, powers and method of operation; -- State Department of Human Rights (or equivalent) and State ES activities in this area.	Materials: -- Legislation: Civil Rights Act of 1964 -- Ross, Arthur M., and Herbert Hill, Employment, Race and Poverty. N.Y: Harcourt, Brace and World, 1967. -- Explanatory materials from the agencies listed Contacts: -- Equal Employment Opportunity Coordinator in the agency -- State Commissionor of Human Rights -- NAACP, Urban League, Local Chapter Director -- DOL, Women's Bureau Coordinator -- National Organization for Women, Local Chapter President
Federal and State Labor Laws -- Office of Occupational Safety and Health: purpose, powers and methods of operation -- Federal statutes concerning working conditions, standards and minimum wages; -- State statutes	Materials: -- Appropriate legislation on OSHA -- Wage and working conditions legislation Contacts: -- U.S. Dept. of Labor, Occupational Health and Safety Administration, Washington, D.C. 20210 -- State Department of Labor

TABLE 2.2, cont.

CURRICULUM GUIDE: KNOWLEDGE

OVERVIEW OF MANPOWER-RELATED ISSUES, cont.

CURRICULUM CONTENT	INFORMATION SOURCE
The Welfare Program -- Federal and state funding system; -- Operation of local welfare agency, eligibility rules and schedule of benefits; -- The Work-Incentive (WIN) Program and other special programs; -- Proposed changes in welfare system.	Materials: -- Handler, Joel F., and Ellen Jane Hollingsworth, The "Deserving Poor", A Study of Welfare Administration. Chicago: Markham Publishing Co., 1971. -- Levitan, Sar, Martin Reid, and David Marwick, Work and Welfare Go Together. Baltimore, Md.: Johns Hopkins University Press, 1972. Contacts: -- ES WIN Program Coordinator -- Local Welfare Director, county or city
Other State and Federal Agencies and Programs -- Department of Housing and Urban Development: purpose and programs, including Model Cities; -- Office of Economic Opportunities - the poverty program; -- State and local agencies concerned with housing and transportation: what are they and how do they function?	Materials: -- Levitan, Sar, Anti-Poverty Work and Training Programs: Goals and Realities. Washington, D.C.: National Manpower Policy Task Force, 1967. -- Publicity materials from each agency Contacts: -- Local Program Directors

TABLE 2.3

CURRICULUM GUIDE: KNOWLEDGE

UNDERSTANDING THE PROCESS OF WORK AND THE WORK ENVIRONMENT

Purpose: To provide the staff with background information, theory and current data on indutries and workers to enable them to plan an effective outreach strategy for the program and to prepare them to function in a business environment.

CURRICULUM CONTENT	INFORMATION SOURCES
The Local Labor Market and Industrial Configuration -- Demographic characteristics of workforce; size of workforce; skill levels; -- Unemployment rate; -- Economic conditions of local industry; -- Number and size of firms in local industries;	Materials: -- Program Plan of Action -- U.S. Census data, 1970 -- Bureau of Labor Statistics data -- ESARS reports -- Chamber of Commerce bulletins -- Economic Development Agency reports Contacts: -- SES Research Director -- SES OAIS Unit -- BLS Area Director
Overview of Industrial Processes and Occupational Content -- Basic processes in local industries; -- Job titles and occupational content in selected industries	Materials: -- Occupational Outlook Handbook, Bureau of Labor Statistics, Washington, published annually. -- Standard text books on industrial processes -- Dictionary of Occupational Titles Contacts: -- SES OAIS Unit

TABLE 2.3, cont.

UNDERSTANDING THE PROCESS OF WORK AND THE WORK ENVIRONMENT, cont.

CURRICULUM CONTENT	INFORMATION SOURCE
Internal Labor Market Theory -- Internal labor market structure; -- Relationships between internal and external labor markets; -- Labor force adjustments through training;	*Materials:* -- Doeringer, Peter B., and Michael J. Piore, *Internal Labor Markets and Manpower Analysis*. Lexington, Mass: D.C. Heath and Co., 1971. *Contacts:* -- Labor economists from local colleges and universities
Labor Organizations in American Industry -- Background of organized labor movement of U.S.; -- Overview of size and organization of labor unions; relationships between international and local unions; -- Overview of collective bargaining process; -- The grievance process; -- Problems that unions or lack of unions cause in plants.	*Materials:* -- Bok, Derek C., and John T. Dunlop, *Labor and the American Community*. New York: Simon and Schuster, 1970. -- Brooks, Thomas R., *Toil and Trouble: A History of American Labor*. New York: Dial, 1964. *Contacts:* -- Labor economists from local colleges and universities -- Local union leaders -- Regional AFL-CIO officials

CURRICULUM GUIDE: KNOWLEDGE

TABLE 2.4

BASIC STEPS IN PROGRAM OPERATION

Purpose: To familiarize staff with the steps involved in mounting an Employer Technical Services program, the goals of each program activity and an overview of the purpose and content of the skill areas in which they will receive training.

CURRICULUM CONTENT	INFORMATION SOURCES
Employer Outreach -- Goals of marketing effort; -- Overview of how outreach process will work; -- Explanation of skill training to be provided.	Materials: -- Pages 48 to 83 of this manual -- Program Plan of Action Contacts: -- SIS and ITS Project Directors
In-Plant Problem Identification and Analysis -- Purpose of this activity; -- Overview of how process will work; -- Explanation of analysis services to be provided.	Materials: -- Pages 87 to 112 of this manual -- Program Plan of Action Contacts: -- SIS and ITS Project Directors
Providing Training-Related Services -- Purpose of this activity; -- Overview of how training will be delivered and developed; -- Explanation of skill training to be provided	Materials: -- Pages 113 to 162 of this manual -- Program Plan of Action Contacts: -- SIS and ITS Project Directors

CURRICULUM GUIDE: SKILLS

TABLE 3.1

COMMUNICATIONS SKILLS

Purpose: To develop communications skills that will improve staff interface with the people they serve (employers, managers, supervisors, workers and union officials); the people with whom they work (SES personnel, cooperating service agency personnel, information sources); and the people to whom they are responsible (agency management, state government officials, federal officials).

TRAINING OBJECTIVES	TRAINING TECHNIQUES	SOURCES OF MATERIALS
1. Staff member will be able to state the factors that hinder communication and list the principles of effective communication.	Exercises	-- Ralph G. Nichols, "Barriers to Effective Communication", Training Directors Journal, Vol. 19, No. 8, Aug. 1965, p. 20-38. -- TR 405 Series -- TR 406 Series
2. Staff member will be able to function productively as a member of a group or team.	Exercises; role playing	-- Luft, Joseph, Group Processes. Palo Alto: 1963. -- TR 401 Series -- TR 402 Series
3. Staff member will be able to use the telephone to make an appointment with a company official.	Role playing	-- Upgrading, Vol. 2, p. 81-87*
4. Staff member will be able to make an effective oral presentation to an employer on the goals and capabilities of the program.	Role playing; group discussions on how to make presentation and what should be presented.	-- TR 104 Series -- TR 107 Series -- Upgrading, Vol. 2, p. 87-122*

* *Upgrading the Underemployed in the Work Environment*, a report in four volumes, prepared for the U.S. Dept. of Labor by Skill Achievement Institute. This report is available from the Department of Labor.

TABLE 3.1, cont.

COMMUNICATIONS SKILLS, cont.

	TRAINING OBJECTIVES	TRAINING TECHNIQUES	SOURCES OF MATERIALS
5.	Staff member will be able to answer an employer's questions about the program and respond to his objections in a logical, non-defensive manner.	Role playing; brainstorming; group discussion	-- TR 117 Series
6.	Staff member will be able to conclude employer visit efficiently and summarize whatever agreement was reached.	Role playing	-- TR 110 Series
7.	A staff member will be able to interview a company manager, supervisor and production worker.	Role playing; exercises	-- TR 403 Series -- TR 404 Series -- See pages 106-112 of this manual.
8.	Staff member will be able to write an effective business letter asking for or confirming an appointment.	Demonstration; practice/ evaluation	-- Fielden, John S., "What Do You Mean I Can't Write?" *Harvard Business Review*, Vol. 42, No. 3, May-June 1964, p. 144-157.
9.	Staff member will be able to organize and write a report to an employer on the results of in-plant problem analysis.		-- Fielden, John S., "For Better Business Writing", *Harvard Business Review*, Vol. 43, No. 1, Jan-Feb., 1965, p. 164-172. -- Gunning, Robert, *New Guide to More Effective Writing in Business and Industry*. Boston: Industrial Education, 1962.
10.	Staff member will be able to write curriculum outlines and training materials.	Demonstration; practice/ evaluation	-- See Appendix II to this manual.
11.	Staff member will be able to execute all reporting forms clearly.	Demonstration; practice/ evaluation	-- See pages 38-47 of this manual.

CURRICULUM GUIDE: SKILLS

TABLE 3.2

ANALYTICAL AND PROBLEM SOLVING SKILLS

Purpose: To enable staff to identify and recommend solutions for manpower-related problems in a variety of business and governmental organizations using standard research and interview techniques.

TRAINING OBJECTIVES	TRAINING TECHNIQUES	SOURCES OF MATERIALS
1. Staff member will be able to recognize and understand basic industrial processes and service delivery systems.	Plant tours; films; lectures; readings; seminars, with members of staff doing research and making presentation of process or system	-- Standard vocational education textbooks; local industry associations or large firms.
2. Staff member will be able to design and use appropriate instruments for collecting data.	Readings; practice	-- See pages 87-103 of this manual.
3. Staff members will be able to write clear concise statements of interview results.	Readings; lectures; demonstration; observation; practice exercises with feedback	
4. Staff member will be able to identify and categorize plant problems into four basic areas: Skill/Knowledge; Attitude; Environment; and Structure.	Readings; case studies; practice exercises	-- TR 204 Series -- TR 403 Series -- TR 404 Series -- See pages 87-162 of this manual.
5. Staff member will be able to analyze problems and identify probable causes.	Problem-solving exercises; practice exercises with feedback	-- TR 204 Series -- See pages 87-162 of this manual.
6. Staff member will be able to recommend remedial action to solve problems.	Case studies; brainstorming; group discussion; practice exercises	-- TR 205 Series -- TR 206 Series -- See pages 87-162 of this manual.

CURRICULUM GUIDE: SKILLS

TABLE 3.3

TRAINING SKILLS

Purpose: To provide staff with skills necessary to assess company training needs, design training programs, develop curriculum, write or secure appropriate training materials and conduct training programs.

TRAINING OBJECTIVES	TRAINING TECHNIQUES	SOURCES OF MATERIALS
1. Staff member will be able to state the principles of behavioral change as the desired outcome of training.	Readings; lecture	-- Craig, Robert L. and Lester R. Bittel, Ed., Training and Development Handbook, American Society for Training and Development. New York: McGraw-Hill Book Company, 1967. -- See Appendix II to this manual.
2. Staff member will be able to state the steps involved in developing curriculum.	Readings; lecture	-- ASTD Training and Development Handbook -- See Appendix II to this manual.
3. Staff member will be able to perform a task overview and analysis of both a functional and a chronological job.	Readings; lectures; demonstration; practice exercises with feedback	-- Handbook for Analyzing Jobs, U.S. Dept. of Labor, 1972. -- See Appendix I to this manual. -- TR 208 Series
4. Staff member will be able to write behavioral objectives for the training program.	Readings; lecture; practice	-- Mager, Robert F., Preparing Instructional Objectives. Palo Alto: Fearon Publishers, 1962. -- See Appendix II to this manual.
5. Staff member will be able to design and administer a pre/post test to be used as part of a training program.	Readings; demonstration; practice	-- Mager, Robert F. and Peter Pipe, Analyzing Performance Problems or "You Really Oughta Wanna". Belmont, Calif.: Fearon Publishers, 1970. -- See pages 21-22 of this manual. -- See Appendix II to this manual.

TRAINING OBJECTIVES	TRAINING TECHNIQUES	SOURCES OF MATERIALS
6. Staff member will be able to write a curriculum outline, and from the outline develop or select training materials.	Readings; practice	-- ASTD Training and Development Handbook -- See Appendix II to this manual. -- Mager, Robert F. and Kenneth M. Black, Jr., Developing Vocational Education. Belmont, Calif.: Fearon Publishers, 1967, p. 75.
7. Staff member will be familiar with the principles of group dynamics and will be able to explain and conduct at least five group dynamics exercises.	Readings; seminars; practice exercises with feedback	-- TR 401 Series -- Role Model Role Playing: A Manual for Vocational Development and Employment Agencies, Manpower Science Services, Inc. Prepared for U.S. Dept. of Labor.
8. Staff member will be able to demonstrate to other staff members a variety of effective classroom techniques.	Observation; role playing practice; (Video tape can provide valuable feedback in this training)	-- ASTD Training and Development Handbook
9. Staff member will be able to demonstrate an ability to operate a sound-movie projector, an audio tape recorder, a slide projector, an overhead or opaque projector, and any other audio-visual equipment available for use by project staff.	Demonstration; practice	-- Equipment vendors -- Experienced agency personnel
10. Staff member will be familiar with standardized tests and testing procedures used by ES and private companies.	Lectures; readings	-- TR 203 Series -- SES Testing Director

TABLE 3.3, cont.

REPORTING DESIGN

Purpose: To establish a data collection system and analysis procedures that will insure the creation of reports appropriate for internal management, external evaluation and monitoring, and public information.

Overview

Effectively reporting on the diversified activities and accomplishments of an Employer Technical Services program presents several thorny problems. Many of the activities and outcomes associated with this type of effort are difficult both to classify and to quantify. The training activities, which may constitute a major portion of the program's service package, do not fit comfortably into the classification scheme offered by the Manpower Administration Reporting System (MARS) - MA 101 Series used by most manpower programs to report on training programs and accomplishments. In many cases the manpower service, although initiated by the SES, may be performed by another agency creating problems of duplicate reporting. Also, the two operating Employer Technical Services progras, ITS and SIS, have found state, regional and federal officials singularly disinterested in their regular reports.

Anecdotal material describing an innovative in-plant project is always appreciated by agency management, especially when accompanied by a letter of thanks from a company official. But because technical service programs are viewed by most SES decision makers as peripheral to the labor exchange function of the Employment Service, reports of project outcomes and process descriptions are too often given only a cursory review or worse -- ignored. Despite this, reporting can be a useful tool both to keep agency management informed of the potentials of the program and, perhaps more importantly, to provide feedback to program staff concerning the impact of their efforts. The reporting procedures for an Employer Technical Services program will evolve out of the nature of the service structure and the requirements of the particular state agency. The material offered in this section contains general information areas that have some relevance for this program, several recommended data collection instruments and a suggested reporting guideline.

Types of Information

The activities of an Employer Technical Services program can be reported both in quantative and qualitative terms. The general types of information that reflect the accomplishments and impact of the program are outlined below:

-- Accomplishment Data: This is confined to numerical information on firms visited, persons contacted and interviewed, supervisors and workers trained, occupations trained for, jobs analyzed, job orders written, tests given, etc.

-- Impact Data: This is qualitative and quantitative information measuring the effects of program activities on the employees and companies served, as well as on the agency. The impact on employers served might be assessed in terms of renewed or improved relationships with the Employment Service, increased productivity, improved employee morale, and acceptance of recommendations resulting from in-plant analysis. The effect on workers may be indicated by increases in skill and salary levels, enhanced responsibilities, and decreases in absenteeism, lateness and grievances. The impact on the agency might be reflected by increases in job orders and openings and improved knowledge by the ES of company occupational structure and manpower needs. While it is desirable to measure impact in quantitative terms, the nature of these effectiveness indicators often requires subjective assessment.

-- Work Load Measures: This includes quantitative data on man-hours required to accomplish in-plant analytical services, curriculum development time and printing volume, hours of training provided, etc. The information may be used to generate cost data for services rendered and to provide a management planning and evaluation tool.

-- Served Population Characteristics: This is quantitative characteristic information on the workers and companies served by the program. Data to be collected on workers might include race, sex, age, work and salary history, time in present job and firm, career aspirations, etc. On employers, the information might include SIC, principal product product or service, size of workforce, relationship with the ES, turnover rate, staffing patterns, minority group representation, etc. This data is collected primarily to satisfy reporting requirements dictated by federal, regional and state governments. However, it can also serve to measure the degree of variety among clients served by the program as a quide for future marketing efforts.

-- Process Descriptions: This is narrative information describing the approaches taken by the program in response to company needs and problems, assessments of the relative success of those techniques in the company environment, and suggestions for the replicability of the approach in similar situations in other firms. This information may be disseminated to persons involved in similar activities both inside the program and in other technical assistance programs so they can benefit from the experience.

-- Labor Market Information: This includes both quantitative and qualitative information on external labor market developments that have come to the attention of the program staff, such as planned company expansion, acquisition of new equipment, potential layoffs, plant closings, labor disputes, etc. This information may be used to prepare the ES and other organizations to respond to the future needs of the local labor market.

Data Collection Instruments

The design of the data collection and storage systems will depend on agency reporting requirements and the specific goals of the program. In general, information concerning the nature and outcome of services provided to a particular company may be recorded on the three forms described below:

-- *Company Service Record* (Figure 2): Contains data on all non-training services provided to a company such as job order-taking, referral to other manpower service programs, in-plant analysis services, testing and test development and occupational analysis. The form is to be executed by the senior ETS program offical working with the company.

FIGURE 2

COMPANY SERVICE RECORD*

COMPANY NAME: ______	PRINCIPAL PRODUCT OR SERVICE: ______
COMPANY ADDRESS: ______	S.I.C. CODE: ______
SIZE OF WORKFORCE: ______	DATE: ______

SERVICE PROVIDED (Check One):

1. In-Plant Problem Analysis ☐ Training Program: Yes ☐ No ☐
2. Occupational Analysis ☐ Number of Jobs Analyzed ______
3. Job Order Writing ☐ Orders ______ Openings ______
4. Testing ☐ Number Tested ______
5. Referral to Other Manpower Service ☐ (Explain) ______
6. Other ☐ (Explain) ______

Describe Service Fully (What was done? How? Why? Results):

______

If Upgrading Resulted From Service:

How Many Were Upgraded ______

Average Salary Increase ______

Did Service Lead To Training?

Yes ☐ No ☐

Who Performed Service? ______

Man-Hours Spent ______

Total ______

*(This for is to be completed by the project coordinator)

- -- *Training Program Record* (Figure 3): Contains information on type of training offered, number of hours for each training track, number of trainees, training materials and curriculum utilized, the trainers involved, a narrative description of problems enountered and learnings acquired during the training. The form is to be executed by the senior trainer working with the company for each training track provided (for example, if there were both a supervisory course and a skills training course, two forms would be completed).

- -- *Trainee Information Form* (Figure 4): Contains data on trainee characteristics, work history, services provided and some results of the training. The MA-101 series can be used for this purpose, but its classification scheme may be unable to account for non-skill training activities (supervisory, human resource development, safety, etc.). The form is to be executed by the senior trainer in cooperation with the company personnel staff. In no case should the trainee be asked to complete the form.

An additional form, the *Employer Contact Record*, designed to report operational data on the outreach effort (see Figure 9, p. 68), can be used to report significant information which may have applicability outside the marketing function. For example, labor market information concerning company expansion, acquisition of new equipment or impending layoffs may be reported on this instrument. This form should be executed by the ETS program representative contacting the employer. It should be reviewed by the Operations Supervisor and Program Director and important items should be extracted for use by other ES units concerned with these matters.

The forms may be stored by company name, type of form, or both. It is generally advisable to store the forms both ways. In this manner a company record file can be established to permit easy retrieval of information on all services performed for a particular client. Filing all service, training and trainee records by like forms, within set time frames, facilitates summary reporting to agency, regional and federal officials.

FIGURE 3

TRAINING PROGRAM RECORD*

COMPANY NAME: ______	PRINCIPAL PRODUCT OR SERVICE: ______
COMPANY ADDRESS: ______	S.I.C. CODE: ______
SIZE OF WORKFORCE: ______	DATE: ______
TYPE OF TRAINING TRACK: Skill ☐ Supervisory ☐ Orientation ☐ Trainer Training ☐ Other ☐	Title of Training Track: ______ Company Division or Department: ______ Was Program the Result of a TNS? Yes ☐ No ☐ If no, explain: ______

Number of Trainees at Outset ______ Number Completing Track ______
Number Upgraded ______ Average Salary Increase ______
Length of Training: ______ hours, ______ sessions, ______ hours each
Date Began ______ Date Completed ______
Number of Classes ______

Where was Training Conducted: ______
On Company Time ☐ After Hours ☐

CURRICULUM AND TRAINING MATERIALS USED (If more space is needed, attach sheet):

Type	Source (with address)

TRAINERS:

Name	Organization (if not ES project staff)

DESCRIBE TRAINING FULLY (Including problems, learnings, comments, etc.):

______

______

______

______

*(This form is to be completed by the project coordinator)

FIGURE 4

TRAINEE INFORMATION FORM*

TRAINEE NAME: ______________________
Last First Initial

EMPLOYER NAME: ______________________

TRAINEE ADDRESS: ______________________
____

EMPLOYER ADDRESS:

S.I.C. CODE:

Soc. Sec. Number:

Sex:
Male ☐
Female ☐

Age:

Sole Wage Earner:
Yes ☐ No ☐
Number of Dependents: ________

Check One: Caucasian ☐
Negro ☐
Oriental ☐
If Spanish Surname, Check One:
Mexican American ☐
Puerto Rican ☐
Other ☐

EDUCATION:
Number of years completed ______________
Post-school vocational training __________ mos.
Subjects:

Veteran:
Yes ☐ No ☐

YEARS GAINFUL EMPLOYMENT:
Under 1 year ☐ 1-2 years ☐ 3-9 years ☐ 10 years or more ☐

PRESENT COMPANY WORK HISTORY:
Date Joined Company ______________

1. Entry Job Title ______________ DOT Code ______________ Wage ______________
2. Present Job Title ______________ DOT Code ______________ Wage ______________
3. Upgrade Job Title ______________ DOT Code ______________ Wage ______________

WORK HISTORY (List below last three employers, starting with last one first):

1. Company ______________ Principal Product, Service ______________
   Job Title ______________ Began ______________ Left ______________
2. Company ______________ Principal Product, Service ______________
   Job Title ______________ Began ______________ Left ______________
3. Company ______________ Principal Product, Service ______________
   Job Title ______________ Began ______________ Left ______________

SERVICES PROVIDED:

Dates

1. Counseling ☐ ______________
2. Training
   Supervisory ☐ ______________
   Upgrading ☐
   Other ☐
3. Other Services ☐ ______________

Describe fully the nature of training and services provided to this trainee:

____
____
____
____
____
____

Please attach any pre-training, post-training and follow-up evaluation information on trainee.

*TO BE COMPLETED BY ETS STAFF OR COMPANY PERSONNEL DIRECTOR. UNDER NO CIRCUMSTANCES SHOULD TRAINEES BE ASKED TO COMPLETE THIS FORM.

Reporting System

The content and formats of reports on company activities and accomplishments will be determined by the emphasis of the program and by state and federal reporting requirements. Some examples of the types of reports that may be produced from the data collected include:

- -- Trainee Characteristics by Training Impact
- -- Company Services by Company Characteristics
- -- Process Description by Company Characteristics
- -- Company Use of ES as Hiring Source by Type of Service Rendered
- -- Training Problems by Training Techniques
- -- Periodic Labor Market Reports

The resulting reports (the report formats will be determined by the needs of the program) can be directed to a variety of organizations for several purposes. Below is a list of possible recipients of the reports, and in Figure 5 the types of information gathered are related to the potential report recipients.

- -- Program Staff: Need all types of data in order to generate reports for higher levels of the organization, and for internal management purposes, public reporting, and self-assessment.
- -- State ES Officials: Need all types, with the exception of process data, for evaluation and monitoring, reporting to higher levels of the organization and planning future activities.
- -- State and Federal Governments: Need summary data on program impact and served population characteristics to satisfy federal reporting requirements and for evaluation, monitoring and planning purposes.
- -- Employment Services in Other States: Need accomplishment and impact data as well as process descriptions in order to establish and improve similar Employer Technical Services programs.
- -- Cooperating Agencies: All local agencies with which the program works, such as CAP, NAB, welfare, etc., need statistical data on program accomplishments, impact and population served, as well as narrative information on the techniques the program uses. This data can be used to assess the

FIGURE 5

REPORTING DESIGN

TYPES OF DATA	REPORT RECIPIENTS					
	Program Staff	State ES Officials	State and Federal Government	Other State Employment Services	Cooperating Agencies	Community
Accomplishment Data (What You Did)	Statistics	Statistics	Statistics	Statistics	Statistics	Statistics
Impact Data (Its Effect)	Statistics	Statistics and Narrative	Statistics	Statistics and Narrative	Narrative	Narrative
Work Load Measures		Statistics		Statistics		
Served Population Characteristics	Statistics	Statistics				Statistics
Process Descriptions	Narrative	Narrative		Narrative	Narrative	
Labor Market Information	Statistics and Narrative	Statistics and Narrative			Statistics and Narrative	Statistics and Narrative

the value of the cooperative relationship and satisfy their own reporting requirements.

-- Community: Has need for data on program impacts to heighten awareness of availability of services.

Employer Outreach

EMPLOYER OUTREACH

Coordinated with other employer contact activity in a State Employment Service agency, the Employer Technical Services program will mount an outreach effort to:

- *Create an awareness in the employer community of the services available through the program;*
- *Identify and contact those employers who might benefit from the program's services;*
- *Elicit agreements from employers to utilize the program's analytical and training services.*

EMPLOYER OUTREACH

The concept of marketing government services has generally been troublesome for decision-makers in the public sector. There continues to be a great deal of resistance on the part of federal, state and local bureaucrats to utilizing the marketing approaches developed and used so successfully by private organizations to sell goods and services. Government managers seem to feel that if a service is free, it should be self-marketing and, therefore, it is inappropriate to expend substantial resources on an intensive, professionally developed marketing campaign.

The Employment Service system, perhaps because of the competitive nature of the employment agency business, has conducted a rather broad employer outreach program for its job solicitation and job development functions. Telephone calls soliciting jobs on behalf of individual applicants, field visits to employers, and the use of promotional mailings are standard tools of the employer services outreach program. Despite the familiarity with these techniques, however, the Employment Service has been reluctant to market the Industrial Services program with a similar measure of aggressiveness. As a result, in most states, the level of requests for industrial services has dwindled and the program has all but withered.

The Employer Technical Services program advocated in this report requires a well-designed, actively pursued, professionally conducted employer outreach campaign -- at least in the early operational stages. Employers do not associate a State Employment Service with the types of consulting and technical assistance services that are offered through this program. Therefore, it is necessary to spend considerable staff resources on contacting employers in order to make them aware of the goals and potential benefits of the program. Once the program's reputation is established in the business community, the intensity of the outreach effort can be reduced to a maintenance level, relying primarily on referrals and general public relations activities for new programs.

The employer outreach program advocated here consists of the following three phases:

- -- Planning for Employer Outreach: During this phase, objectives are established for the outreach effort, and a strategy document is prepared containing guidelines for selecting potential client organizations, specifications for the development of marketing aids and operating procedures for the direct contact campaign.

- -- Pre-Contact Outreach Activities: Using the guidelines established in the previous phase, individual organizations are selected for contact. Because direct selling is costly it is necessary to optimize each sales effort. Therefore, it is advocated that pertinent data be collected on potential clients in order to focus the marketing presentations.

- -- Direct Contact Campaign: The third phase includes organizing, monitoring and efficiently conducting an employer contact campaign in order to develop a program base that will fully occupy the staff.

PLANNING THE OUTREACH EFFORT

Purpose: To establish objectives for the outreach effort and create an outreach strategy document that will insure the integrity of the employer contact campaign and a uniformity of process.

Overview

Privately owned firms have long recognized the value of market research in focusing sales approaches on that segment of the population most receptive to the product or service. These research and planning techniques have particular applicability to the process of marketing an Employer Technical Services program. Since the cost of sales for this program is significant, the focus of the employer contact effort must be precise in terms of the industries and specific firms to be contacted.

What is indicated, therefore, is a substantial planning effort which entails establishing the outreach objectives, developing a document defining the markets with the greatest potential and establishing procedures designed to effectively tap those markets. The process offered in this section is elaborate, and program managers may choose to delete certain tasks. However, it is suggested that a written strategy document outlining objectives and time frames be prepared as a minimum effort.

Establishing Outreach Objectives

It is best to state the objectives of the outreach effort in specific terms before attempting to develop a marketing strategy document. These objectives, establishing time frames, industry focus and program development expectations in quantifiable terms can be instrumental in monitoring and evaluating the employer contact activity.

Some of the categories to be considered when setting objectives and examples of specific objectives in each category include:

- Time frames for initial contact campaign, for example:
  - To initiate direct contact campaign by (date).
  - To have publicity materials available by (date).
  - To conduct initial review of marketing effort by (date).
  - To establish first in-plant project by (date).
  - To establish desired program base by (date).
  - To implement maintenance marketing effort by (date).
- Industries and companies to be contacted, for example:
  - To identify at least (number) industries to be the focus of the marketing activity.
  - To identify at least (number) organizations in each industry (numbers may vary for each industry).
  - To contact (number) organizations through personal visits.
  - To survey by mail (number) companies concerning interest in training or other service programs.
  - To mail out promotional brochures to (number) potential client organizations.
- Numbers and types of programs to be established, for example:
  - To secure agreements for at least (number) in-plant problem analysis programs.
  - To secure agreements for at least (number) upgrading training programs.
  - To secure agreements for at least (number) supervisory skills training programs.
- Expected participation in general marketing activities, for example:
  - To make at least (number) presentations to local business groups, community organizations and industry associations.
  - To place at least (number) articles in local media.
  - To plan and operate at least (number) employer seminars concerning the potentials of the ETS program for solving manpower-related problems.

Creating the Outreach Strategy Document

The next step in preparing for employer outreach is to establish a strategy for accomplishing the objectives. A formal document, rather than an unwritten plan, is suggested because the very process of writing requires the type of organized thinking necessary to develop a logical and well-ordered strategy. In addition, a document provides the staff with a more structured framework in which to carry on the marketing activity.

While the strategy should not be so rigid as to inhibit the creativity and enthusiasm of the staff, it should cover several broad areas and answer a number of questions. Subsequent units of this section contain information that may assist in the preparation of the strategy paper outlined below.

The draft should be distributed to the program staff as well as other agency personnel whose activities may be affected by the proposed strategy. All involved should be encouraged to suggest modifications and see that the plan is compatible with other agency outreach activities.

Suggested Outline for the Outreach Strategy Document

I. Description of proposed program service model as set forth in the Plan of Action.

II. Statement of outreach objectives (see previous section).

III. Guidelines for selecting potential client organizations:

1. What are the criteria for selecting companies for contact? Some possible criteria might include:
    - -- Firms in the (name), (name), and (name) industries;
    - -- Firms having employment levels between (minimum #) and (minimum #);
    - -- Firms having average salary levels below _______ dollars per hour;
    - -- Firms with Unemployment Insurance tax rates in excess of ________ percent (indicative of high turnover);
    - -- Firms with a referral to placement ratio in excess of (# referrals) to (# placements);

- Firms employing large numbers of minority group workers in low-wage jobs;
- Firms that place only entry level job orders with the ES, or firms that have stopped placing orders with the ES;
- Firms whose orders for skilled workers remain unfilled for long periods of time;
- Firms planning major expansion.

2. What weighting should be given to these factors when selecting companies?
3. Who will make the selection of companies for contact?

IV. Listing of data items to be collected in preparation for contacts:

1. What are the essential data items?
2. What optional data might be useful?
3. What are the potential data sources?
4. How is the data to be recorded?
5. Who will collect the data?
6. How will the data be stored?

V. Establishment of techniques and procedures for direct contact campaign and general marketing effort:

1. How will the staff be organized for the contact campaign?
2. What procedures should be followed in preparing for initial contact with an employer?
3. How should the initial contact be made?
4. What should be covered during the first meeting with an employer?
5. What follow-up procedures should be implemented?
6. What types of publicity materials should be developed?
7. How will materials be developed?
8. How should the materials be distributed?
9. Who in the project will be responsible for securing the materials?

VI. Establishment of procedures for finalizing agreements with employers:

1. What will the form of the agreement be (verbal, written)?
2. Who will be empowered to commit the ETS program to a company service project?

3. Will the employer be asked to make any commitments? If so, what will they be?
4. Will agency management be involved in the agreement process?

VII. Establishment of monitoring and feedback procedures for outreach effort:

1. Who will be responsible for monitoring the outreach effort?
2. What types of data (workloads and outcomes) should be collected on marketing effort?
3. How should the staff be debriefed?
4. What type of feedback should the marketing staff receive?
5. At what point(s) should the marketing activities be reviewed?

PRE-CONTACT OUTREACH ACTIVITIES

Purpose: To identify organizations to be contacted and to gather information that will provide the outreach staff with the data necessary to develop informed, effective marketing presentations geared to the specific needs of potential clients.

Overview

Direct contact selling, no matter what the product, is an exceptionally expensive approach to marketing. In order to minimize the cost involved in this type of activity, it is necessary to identify clients with the greatest need for and receptivity to the service. Employment Service managers are well aware of the costs of direct contact. Discussions of the relative merits of field visiting as an effective job development and outreach device have raged across ES conference tables for many years.

While there is little doubt that general publicity campaigns are less costly, it is unlikely that an Employer Technical Services program can be established without a substantial direct contact campaign. In order to make this effort as cost-effective as possible, the decision for each visit must have a valid rationale and be based on accurate and timely information on the recent history and potential needs of the company. Similarly, if the visit is to have a positive outcome, the presentation to the employer should be focused on his needs as indicated by an analysis of available information. All this suggests that a reasonable amount of energy and resources be allocated to support two pre-contact outreach activities: company selection and specific company research.

Company Selection

The types of firms to be contacted during the outreach effort will be determined by the nature of the local labor market and the goals and service capabilities of the ETS program.

The experiences of similar technical assistance programs have indicated that a certain class of organizations -- marginally profitable, labor intensive, with reasonably small workforces, and often experiencing productivity problems -- are generally receptive to the types of services being offered. Larger, well-financed firms usually have the resources to undertake remedial activities without outside assistance, or if they feel in need of help, tend to engage the services of private management consultants.

The first step in the selection process is the identification of a staff member to be responsible for creating and maintaining a list of potential clients. This list may be developed by applying the company selection criteria set forth in the outreach strategy document against data from the many sources available both within and outside the agency. Linkages should be established with groups or individuals who may have knowledge of companies with an apparent need for technical services.

One key information source is the ES Job Bank System. This computerized system contains large quantities of data which can be tapped during the selection process. Members of the outreach staff would probably benefit from a visit to the ES Job Bank Coordinator for an explanation of the system, what its present outputs are, what special computer runs of historical data can be generated, and how this data might be used. Non-computerized ES files, such as OAIS and ERR Employer files, may also be valuable sources for leads. For example, if the OAIS unit conducted a turnover study in a company and found that workers were quitting because they were unable to advance to higher level jobs, the ETS program might be able to help the firm establish job ladders, restructure jobs or set up a training program. In addition, the local chapter of the National Alliance of Businessmen and other community manpower agencies are good sources for information, since the ETS program may be able to create program linkages with them for the provision of services. The specific sources used will depend on the selection criteria which will be different in each state. Below are several suggested sources organized by type of data:

-- Companies by Industry: Generally, the local Chamber of Commerce or Manufacturers Association publishes a list of companies by 4-digit SIC code or by principal product. In addition, the Unemployment Insurance files contain 2-digit SIC designations for all covered firms which can be generated by special computer runs. Job Bank historical files can be manipulated into a list of employers by SIC code. Finally, the ERR files in many states are organized alphabetically and by 4-digit SIC code.

-- Size of Firms: The UI files, Job Bank and the ES 551 files are perhaps the best sources for information on workforce levels of local firms. In addition, the Bureau of Labor Statistics collects large quantities of workforce data for the Employment and Earnings Statistics Report Series which is published monthly.

-- Turnover Rate: The best source of information on turnover rate is the UI reports. Changes in the tax rate may indicate substantial layoffs or firings for cause. In addition, data on increases in orders placed with the Employment Service is available in the Job Bank reports. Finally, the ERR's may have non-recorded information on firms having manpower problems.

-- Unfilled Skill Needs: The best source for this information is the Aged Order Listing of Job Bank. This report lists all openings which the Employment Service has been unable to fill and which have remained in the system for some time. Other leads on firms with skill needs can be obtained by reviewing the classified advertisements in local papers. If a company repeatedly places ads for the same jobs, it may indicate a situation that might be remedied by a special training program.

-- Planned Expansion: The data sources listed above for unfilled skill needs may also indicate planned organizational expansion. In addition, the local Chamber of Commerce, Economic Development Administration or the Mayor's Office will often know of firms who are moving into the area or are in in the process of enlarging. Another data source might be the local building permit agency which would know if organizations plan to expand their facilities.

-- Minority Group Employment: There are two basic sources for this information, but in both the data is provided by industry rather than by specific company. The census reports have information on minority group representation by industry, but this information becomes dated as the decade passes. A more up-to-date, and probably more reliable source is the Equal Employment Opportunity Commission reports which indicate not only the percentages of minority groups in each industry, but their distribution in the occupational structure. Also, the local Office of Federal Contract Compliance has data available on minority group levels in firms holding federal procurement contracts.

-- Low-Paying Industries: The primary source of data on this subject is the Bureau of Labor Statistics Employment and Earnings Statistics Series. Once again, the data is presented by industry, but generally firms within an industry pay similar wages. Another source is the Job Bank Aged Order Listing. Often the principal reason for difficulty in filling a job is that the pay rate is not competitive in the local labor market.

The number of potential firms to be identified will be determined by the outreach objectives and strategy. Experience has indicated that the ratio of the number of contacts made to the number of programs developed is usually 10 to 1. Therefore, the marketing specialist would be safe in creating a list ten times greater than the number of service programs called for in the objectives.

Pre-Contact Company Research

Prior to contacting employers, a base of information should be collected to provide the staff with the requisite background for making informed presentations to employers. The items of information that seem to be most useful in preparing for a visit to an employer are shown on the *Company Information Form* in Figure 6. As indicated on the form, some items are essential, and others, while helpful in pinpointing particular company problems, are optional. It is desirable to use a two-part carbon form so that one copy can be placed in the company file and the other retained by the staff person making the contact.

The sources suggested on the form in Figure 6 will generally be reliable and valid. However, since the ES files and even Chamber of Commerce directories may not be up-to-date on the latest executive changes, a call to the company switchboard operator to check the names and titles before mailing literature or calling for an appointment might help avoid embarrassing mistakes.

The information can be collected by one person, a committee, or by the individual staff members who will visit particular companies. Much of this information can be recorded and verified by clerical personnel under the direction of the staff professional in charge of the visit.

FIGURE 6

EMPLOYER OUTREACH -- COMPANY INFORMATION FORM

PART I - TO BE COMPLETED PRIOR TO ANY CONTACT WITH EMPLOYER

COMPANY NAME:
Chamber of Commerce Directory, ES 551 Employer File

PARENT COMPANY NAME, IF ANY: *551 File, Moody's Index*

TELEPHONE NUMBER:
Telephone Directory
ES 551 File

COMPANY ADDRESS (AND DIRECTIONS ON HOW TO GET THERE, IF NECESSARY):
Telephone Directory
ES 551 File

COMPANY EXECUTIVE NAME:
Company Switchboard Operator
ES 551 File
TITLE:

OTHER CONTACT NAME:
ES Contact Personnel Who Have Visited the Company Previously
TITLE:

PRODUCT OR SERVICE:
Chamber of Commerce Directory
ERR Files

SIZE OF WORKFORCE: *ERR Files*
Total *UI Files* Minority ______
Male ______ Female ______

DOES COMPANY PLACE JOB ORDERS WITH ES? *Job Bank*
Yes, frequently ☐ Yes, occasionally ☐
No, but did previously ☐ No, never ☐

IS COMPANY ON THE ES DO NOT SERVE LIST?
Yes ☐ No ☐

PART II - OPTIONAL - TO BE COMPLETED IF INFORMATION IS AVAILABLE AND IF TIME PERMITS

EMPLOYER USE OF ES DURING THE LAST SIX MONTHS

Number of Orders	Job Title	Openings	Referrals	Placements
Total		Total		

Job Bank: Employer Order History Index

NEW HIRES LAST SIX MONTHS: *UI Files* TURNOVER RATE LAST SIX MONTHS: *UI Files*

SIGNIFICANT COMMENTS ABOUT COMPANY:

ERR Representatives, Occupational Analysts, Industrial Services Representatives, or Others Who May Have Contacted the Company Recently.

DIRECT CONTACT CAMPAIGN

Purpose: To contact selected employers effectively, discuss with them the capabilities of the program, assess their organizations' needs and come to an agreement on the provision of any necessary services.

Overview

Selling a consulting service is far more complex than selling a product or even soliciting job orders. It requires an ability to assess rapidly the employer's perceptions concerning his workforce and tailor the presentation accordingly.

Since the service being offered is a flexible approach to solving in-plant manpower problems, employers unfamiliar with research and management consulting procedures may have difficulty understanding the marketing presentation. Those who have had some experience with consultants may be surprised to find this type of service available from a public agency. The marketing specialist, therefore, must create an effective image in order to explain the program's capabilities, make a determination of whether or not the company would benefit from a program, work out an acceptable technical assistance package, and develop an agreement on the responsibilities of the project and the firm in the provision of the service. The marketer should not approach an employer "hat in hand", but should be assured and confident in order to convince the employer that the program staff is capable of helping the company identify and solve its problems.

The direct employer contact activities are separated here for discussion purposes into two units -- Individual Employer Contact and General Marketing -- but it should be noted that both types of activities should be carried out simultaneously.

A number of techniques for accomplishing employer contact are suggested below. They are not particularly innovative but are standard sales techniques that have been used successfully by many manpower service programs in their employer contact efforts. These ideas should be reviewed and incorporated into the outreach strategy paper proposed in the previous section.

Individual Employer Contact

Much has been written on how to successfully contact employers. The material presented here is intended as a guide and reference document and does not provide detailed "how to" descriptions of telephone techniques, good listening techniques or other standard employer contact procedures. The general steps in this process are described below, and include: Organizing the Outreach Campaign; Preparing for the Contact; Making the Appointment; the Initial Visit; Follow-up Visits; and Finalizing the Agreement.

Organization of Outreach Campaign

A marketing specialist should be appointed to direct the outreach activity. This staff member will be faced with a number of administrative decisions as the direct contact phase begins. These include the assignment of staff to specific tasks (both general marketing and individual company contact), setting expected levels of activity, scheduling visits, collecting data on all contacts and analyzing results.

- Assignment of Staff

  There are several methods for assigning individuals or teams to contact the employers:

  -- By Industry: Each staff member (or team) is responsible for contacting all listed firms in a designated industry. This has been the most successful method because the person or team develops an industry vocabulary and expertise in pinpointing needs common to many firms in the industry. Also, employers within an industry may be able to refer the marketer to other firms needing assistance.

- -- By Geographic Area: Staff are assigned to contact all companies within particular geographic districts or neighborhoods. This method, because it reduces travel time, is economical and can be effective if the firms selected for contact are widely dispersed.
- -- By Background and Personal Attributes: Staff are assigned on the basis of past work experience, education, training or a personal characteristic that might appeal to a prospective client. For example, a marketer with experience as a machinist might be assigned to visit firms that use machine tools in their production process. A more sensitive assignment would be the selection of a minority group person to "sell" a minority owned firm. This matching procedure is time consuming, and if not properly administered can create upleasant feelings among the marketing staff.
- -- By Random Methods: Staff are assigned by personal preferences -- that is marketers are permitted to pick their own contacts on the basis of individual predilection -- or by alphabetic order or other random methods. This procedure should be followed only if there is not sufficient time to plan for the others.

● Scheduling, Goal Setting, Monitoring and Feedback

Constant monitoring and analysis of the process are critical if the contact campaign is to be maintained and focused on the areas of greatest potential. The analysis of contact outcomes and the feedback of accomplishment data to the marketing staff can substantially improve the effectiveness of the effort. The following material outlines one model for this process. A schematic overview (Figure 7) and a summary table (Table 4) are included along with descriptive information and sample forms for recording and analyzing contact outcomes:

- -- Scheduling: Each week, both the new employer contacts and those follow-up appointments resulting from previous contacts made be scheduled. The scheduling of new contacts is complicated by the fact that other ES units are also contacting employers. To avoid overwhelming employers with offers of assistance from the SES, a weekly list of proposed new contacts should be created and distributed to appropriate ES divisions for comment. After the feedback from these divisions has been received, the resulting list of new contacts for the week should be entered on the

FIGURE 7

OUTREACH PROCESS FLOW

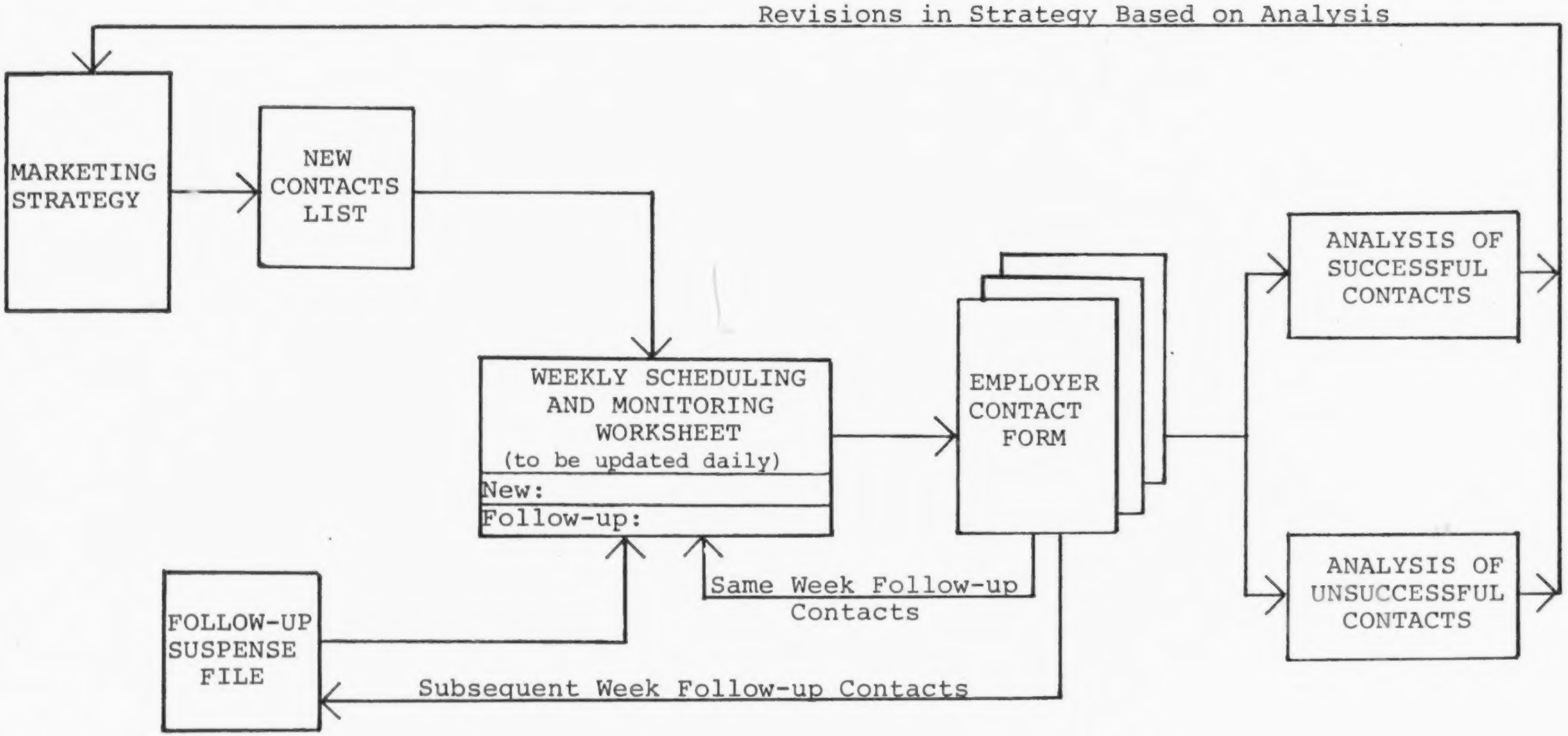

Revisions in Strategy Based on Analysis
MARKETING STRATEGY
NEW CONTACTS LIST
WEEKLY SCHEDULING AND MONITORING WORKSHEET (to be updated daily)
New:
Follow-up:
EMPLOYER CONTACT FORM
ANALYSIS OF SUCCESSFUL CONTACTS
ANALYSIS OF UNSUCCESSFUL CONTACTS
Same Week Follow-up Contacts
FOLLOW-UP SUSPENSE FILE
Subsequent Week Follow-up Contacts

TABLE 4

OUTREACH MONITORING SYSTEM

INSTRUMENT	PURPOSE	INPUT DATA	USES OF FORM
Weekly list of new contacts	To list employers to be contacted for first time	1) List of employers approved for contact 2) Carry-overs from last week's new contacts list	Serves as input for Weekly Scheduling and Monitoring Worksheet, "New Contact"section
Employer contact Follow-up Suspense File	To organize and keep track of planned follow-up visits for coming weeks	From "Appt. for Future Visit" column, Weekly Scheduling and Monitoring Worksheet	Serves as input for Weekly Scheduling and Monitoring Worksheet, "Follow-up Contacts" section
Weekly Scheduling and Monitoring Worksheet (Figure 8)	To schedule all employer contacts and to record outcomes	1) Weekly list of new contacts 2) Follow-up Suspense File 3) Employer Contact Forms	Provides an overview of all employer contact activity
Employer Contact Forms (Figure 9)	To record significant information resulting from employer contacts	Perceptions of marketing specialist who makes contacts	Provides base data for monitoring and analyzing all outreach activities Serves as input for Weekly Scheduling and Monitoring Worksheet and Periodic Analysis of Successful and Unsuccessful Contacts
Periodic Analysis of Successful Contacts (Fig. 10) -and- Periodic Analysis of Unsuccessful Contacts (Fig. 11)	To indicate areas of greatest and least receptivity to program -and- To analyze performance of staff	Employer Contact Forms	Provides data for future planning and focusing of marketing effort

Weekly Scheduling and Monitoring Worksheet, Figure 8. Any future appointments should be recorded in a *Follow-Up Suspense File* organized by ensuing weeks. Each week the file should be accessed and the appointments for the next week entered along with the new contacts on the *Weekly Scheduling and Monitoring Worksheet*. If a follow-up appointment is scheduled for the same week in which the previous appointment was made, it should immediately be recorded on the *Worksheet* without being put in the *Follow-Up Suspense File*. This *Worksheet* serves the dual purpose of listing all new and follow-up visits scheduled for the week and monitoring the results of these contacts.

-- Reporting On Contacts: The results of all contacts should be recorded on an *Employer Contact Form*, Figure 9. This form is to completed after each contact and submitted to the marketing specialist at the end of each day. The activities recorded on the contact forms are then transferred to the *Weekly Scheduling and Monitoring Sheet*. As mentioned above, if a contact resulted in an appointment for a follow-up visit, the information should be put in the *Follow-Up Suspense File* and later entered in the "Follow-Up Contact section" of the *Weekly Contact Scheduling and Monitoring Worksheet* for the week in which the appointment is scheduled.

-- Analyzing the Outcomes: Using the *Employer Contact Forms* as a data base, a periodic analysis of successful and unsuccessful contacts should be undertaken using the *Periodic Analysis of Successful Employer Contacts*, Figure 10, and the *Periodic Analysis of Unsuccessful Contacts*, Figure 11. By analyzing the success of marketing contacts, adjustments can be made in the assignment of staff, presentation techniques, and the focus of the contact campaign. The staff should receive copies of resulting reports, and a discussion should be held concerning indicated procedural modifications.

Preparing For The Contact

One of the basic rules of individual employer contact is: Know the Employer. To reduce the possibility of being surprised or appearing ignorant, the marketer should be well informed about the company's history and possess at least some knowledge of the relevant industrial processes. Careful

FIGURE 8

WEEKLY CONTACT SCHEDULING AND MONITORING WORKSHEET

WEEK OF ______________________

COMPANY TO BE CONTACTED		ETS MARKETING SPECIALIST	DATE OF CONTACT	TYPE OF CONTACT			RESULT OF CONTACT				COMMENTS
				Appt. Call	First Visit	Subseq. Visit	Termination	Appt. for Follow-up Visit	Appt. for Visit	Agreement on Service	
FOLLOW-UP CONTACTS SCHEDULED FOR THIS WEEK											
NEW CONTACTS											

FIGURE 9

EMPLOYER CONTACT FORM

Company Name:	Staff Member Name:	Date:

PURPOSE OF CONTACT (Check one):

Initial Appointment Call ☐
Initial Marketing Visit ☐
Follow-up Visit ☐
Problem Analysis Visit ☐
Presentation of Problem Analysis Report ☐
Other (Explain) ____________________

____

COMPANY OFFICIALS CONTACTED:

Name ____________________
Title ____________________
Name ____________________
Title ____________________
Name ____________________
Title ____________________
Name ____________________
Title ____________________

PRINCIPAL OUTCOME OF CONTACT:

____
____
____
____
____
____

TYPE OF CONTACT (Check one):

Telephone ☐
Personal Visit ☐
Letter ☐

(Attach if letter)

SIGNIFICANT COMMENTS (Add additional sheet if necessary):

____
____
____
____
____
____
____
____
____
____
____
____
____
____

FIGURE 10

PERIODIC ANALYSIS OF SUCCESSFUL EMPLOYER CONTACTS

For Period:
From ________ To ________

Company Name	Name & Title of Person Contacted	ETS Marketing Specialist	Number of Contacts	Probable Reason for Success	Comments
Totals and Analysis					

FIGURE 11

PERIODIC ANALYSIS OF UNSUCCESSFUL EMPLOYER CONTACTS

For Period:
From________To_______

Company Name	Name & Title of Person Contacted	ETS Marketing Specialist	Number of Contacts	Probable Reason For Lack of Success	Comments
Totals and Analysis					

pre-contact preparation can increase the chances for a successful contact and enhance the professional image presented by the program staff. This preparation might include the following activities:

- -- A review of the *Company Information Form*, Figure 6, p. 60 : In addition to a number of specific items on company size and products, the form provides a brief overview of the organization's past relationship with the ES.
- -- Background reading about the industry: Unless the marketer is familiar with the industry's process and occupational structure, it is advisable to become acquainted with the information either through library research or contact with an appropriate resource person.
- -- Checking with other employer contact people in the agency who may have some knowledge of the firm to be visited: Information gleaned from ERR's, OAIS representatives or Contract Service Representatives often provides clues to specific problems the company may be having or hints on how to approach particular company officials. These comments can be recorded on the *Company Information Form.*
- -- Planning the focus of the appointment call and initial visit: After studying all the available information on the company, a decision is made on the general approach to be taken. If, for example, the company is being pressured by equal employment opportunity agencies, the approach might be a discussion of the project's ability to design affirmative action programs, or, if the firm has a high turnover rate, the thrust of the presentation would be the benefits of in-plant problem analysis. If no apparent problems exist, the presentation can be a generalized explanation of the project's capabilities, followed by a discussion of how the organization might benefit from a service program. This planning should not be so rigid that a flexible response to employer comments is impossible.

Making the Appointment

An appointment should generally be made by a telephone call, or by a letter requesting an appointment followed by a phone call. A letter, with a brochure enclosed, prior to a telephone contact can provide the employer with an understanding of the program and thereby ease the difficult task of explaining a rather complex program over the telephone. However, the letter is time consuming and is generally used only when there is little pressure for immediate accomplishment. When making a telephone call for an appointment remember:

- -- Keep the call brief, courteous and to the point, clearly stating your name, your organization and the purpose of the call.
- -- Call at a convenient time. Avoid calling Monday mornings, late Friday afternoon or near the lunch hour.
- -- Listen carefully to the employer's response, and make sure to note correctly the date and time of future appointments.
- -- Express appreciation for the employer's time, and if a personal visit appointment visit was not established, ask if a future call would be appropriate.
- -- If the appointment is more than a week away, send a letter of confirmation.

The Initial Visit

When visiting an employer for the first time, the goal is to establish a good working relationship and make an appointment, if required, for a follow-up meeting. Rarely will agreement on a service program be reached during the first visit. There are a number of things to keep in mind during this visit:

- -- Observe the general rules of etiquette such as arriving on time, dressing neatly, showing appreciation for the employer's time, etc.
- -- If the opportunity presents itself, take a tour of the plant. Most employers are proud of their company and are often willing to take the time to show it off. An alert marketer can use this tour to identify possible problem areas that might serve as the basis for a discussion.
- -- Make a brief, clear presentation of the goals and services of the program, including potential benefits to participating employers. The content of this presentation will be determined by the

probable company needs, the program's service capabilities, and the personality of the marketer. Do not oversell or get on a soapbox, but make a straightforward presentation allowing the employer to participate in the discussion.

-- Elicit the employer's perception of his organization's manpower management problems. Generally, astute management officials have a relatively accurate understanding of any existing problems. In the event, however, that the employer's perceptions appear inaccurate, care must be taken not to "turn off" the employer during the discussion. In other words -- don't come on too strong.

-- Direct the conversation toward matching the perceived needs of the company with the capabilities of the program. If appropriate, suggest possible programmatic responses and ask for another appointment in order to further define a program. A staff member with a background or skill that might help to solve the company's problem might be included in the following meeting.

Follow-Up Visits to Assess Need for Service

Usually one or more follow-up visits are necessary to explore completely the possibilities for programs and make a final determination on the nature of an organization's technical service needs. During these discussions, one of following situations will become apparent:

-- The company has no need for the program's services. In this case, express appreciation, leave an opening for possible future contact, and ask if there are other ways in which the agency may serve the firm (taking job orders, etc.).

-- The company needs help, but it is obviously beyond the scope or capability of the program. In this case, an attempt should be made to draw on other resources in the community to provide the needed assistance.

-- The company needs help, but the nature of the problem is not clear. In this case, an agreement should be made for the ETS staff to conduct an in-plant problem analysis.

-- The company clearly needs a particular technical service which can be provided by the program. In this case, an agreement can be made on the provision of the service.

Finalizing an Agreement on a Service Package

Once an understanding has been reached on a specific course of action, either a problem analysis or a technical assistance program, procedures should be implemented to reach an agreement on the services to be provided and the mutual responsibilities of the parties involved. The agreement may be finalized either verbally or in writing, and should include:

-- An explanation of the ETS program's proposed methodology.

-- A statement of the company's responsibilities, both in terms of supporting the service program and providing benefits to workers (raises, new job titles, etc.) and the agency (job orders, labor market information, etc.) The level of detail in the agreement will depend on the nature of the service package and the willingness of the company to make specific commitments to the workers and the agency. (An example of a letter of agreement used by the SIS program is provided in Figure 12.)

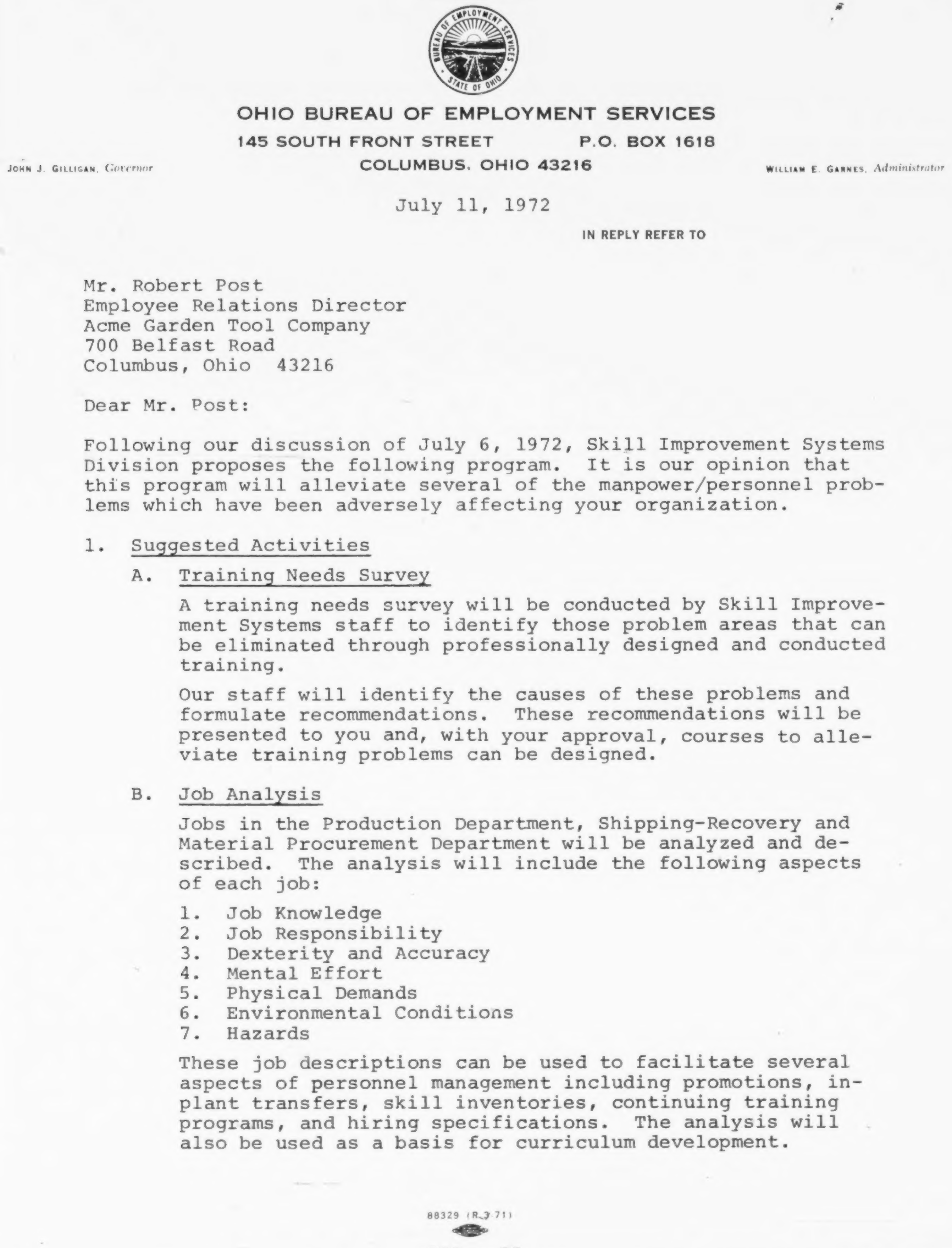
-- Proposed start-up and estimated completion dates for each service to be provided.

-- The nature of the outcome(s). (For example, the outcome of a problem analysis would be a written report.)

-- The identification of a company person to assist the ETS team during the program planning and in-plant activities.

-- The identification of the ETS Project Coordinator for the company service program.

FIGURE 12



OHIO BUREAU OF EMPLOYMENT SERVICES
145 SOUTH FRONT STREET P.O. BOX 1618
COLUMBUS, OHIO 43216

JOHN J. GILLIGAN, *Governor*
WILLIAM E. GARNES, *Administrator*

July 11, 1972

IN REPLY REFER TO

Mr. Robert Post
Employee Relations Director
Acme Garden Tool Company
700 Belfast Road
Columbus, Ohio 43216

Dear Mr. Post:

Following our discussion of July 6, 1972, Skill Improvement Systems Division proposes the following program. It is our opinion that this program will alleviate several of the manpower/personnel problems which have been adversely affecting your organization.

1. Suggested Activities

   A. Training Needs Survey

      A training needs survey will be conducted by Skill Improvement Systems staff to identify those problem areas that can be eliminated through professionally designed and conducted training.

      Our staff will identify the causes of these problems and formulate recommendations. These recommendations will be presented to you and, with your approval, courses to alleviate training problems can be designed.

   B. Job Analysis

      Jobs in the Production Department, Shipping-Recovery and Material Procurement Department will be analyzed and described. The analysis will include the following aspects of each job:

      1. Job Knowledge
      2. Job Responsibility
      3. Dexterity and Accuracy
      4. Mental Effort
      5. Physical Demands
      6. Environmental Conditions
      7. Hazards

      These job descriptions can be used to facilitate several aspects of personnel management including promotions, inplant transfers, skill inventories, continuing training programs, and hiring specifications. The analysis will also be used as a basis for curriculum development.

88329 (R.3 71)

C. Supervisory Training

During the period the analysts are observing the jobs, Supervisory/Management Training is suggested for your "first-line" management personnel. Your stated plan to implement "Management by Objectives" is indeed meritorious, providing the attitude of first line supervisors is acclimated to the overall objectives of the program. The realistic objectives can only be based upon the foremen's knowledge of established or allowable procedures and their overall attitude toward their subordinates.

Supervisory training can be conducted "off premises," at SIS's conference facility where films, slides, flip charts, and videotape equipment are readily available to support the "role playing" necessary to a successful attitude training program.

D. Design of Courses for Jobs Below Supervisory Level

SIS will construct curriculum for the skill upgrading of three or more jobs within the production department. Designing of these courses would also take place during the time your supervisors are being trained. Training of these jobs could then begin upon the completion of supervisory training.

As you know, Skill Improvement Systems will provide these services to you free of charge. We ask only that you:

1. Provide at least eight trainees per training course.
2. Upgrade the position, title and pay rate of each successful trainee within a reasonable period (6 to 8 months) after completion of training. (This does not necessarily apply to present supervisors.)
3. Pay trainees for the hours spent in training, in accordance with their present salary rates. (Incentive rates can be averaged.)
4. Provide an adequate training room for training of "skill" courses.
5. Provide refreshments for "breaks."

Any questions you may have regarding this program may be answered during our next conference. Hopefully, the conference can be scheduled no later than July 17, 1972.

Please feel free to contact me at 747-6782 regarding any matter that you feel needs clarification.

Very truly yours,

Joe Unger
Program Director
Skill Improvement Systems Division

JEU/mr

General Marketing

There are a variety of general marketing techniques which can be used to create an awareness in the employer community of the existence and capabilities of the ETS program. Public relations activities, such as press releases, TV exposure or presentations to civic groups and marketing aids such as pamphlets, brochures, business cards and form letters can be used in addition to or in conjunction with the individual employer contacts. Some suggestions for the general marketing process are outlined below. The nature and intensity of this effort should be consistent with the program goals, agency policies, and available resources.

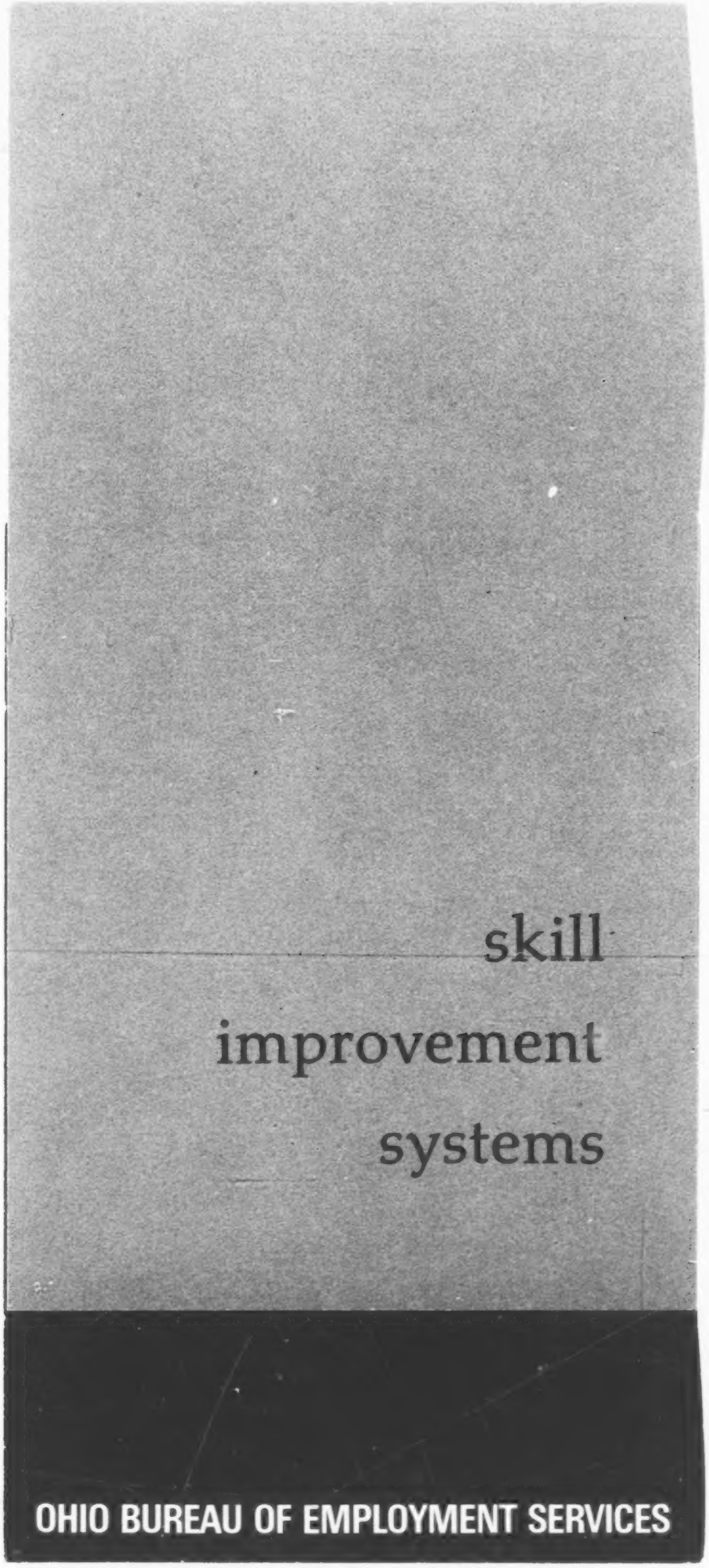
Staffing the General Marketing Effort

A coordinator should be assigned to plan and direct all general marketing activities. Someone with an ability to write and a degree of creativity would be an asset in this position. In implementing the planned general marketing activities, the talents, abilities and backgrounds of the entire staff should be used.

Selecting Marketing Aids

Two marketing aids should be available from the beginning of the outreach effort in order to create a professional image for the program. Business cards are essential for all members of the professional staff. Businessmen are accustomed to exchanging these cards with suppliers and customers and question the professionalism of people without them. Another item which employers expect and often request is a brochure explaining the goals and capabilities of the program. A brochure can be mailed to an employer in advance of a personal visit, left with the employer after a visit, or sent out in a mass mailing or mail survey. Figures 13 and 14 are examples of brochures used by the SIS and ITS projects, and Figure 15 is a general pamphlet developed for the Department of Labor which relates the potentials of a broad upgrading approach to increased productivity. While it is difficult to prepare a brochure before a program becomes operational and develops its full service capacity, it is advisable to have a least some descriptive promotional material available from the beginning of the outreach effort

FIGURE 13



skill
improvement
systems

OHIO BUREAU OF EMPLOYMENT SERVICES

FILMED FROM BEST AVAILABLE COPY

HOW DOES SKILL IMPROVEMENT SYSTEMS HELP OHIO EMPLOYERS?

Skill Improvement Systems offers employers free professional services that help solve productivity problems.

THIS IS WHAT OUR SKILL IMPROVEMENT SYSTEMS CAN DO FOR YOU

Reduce your turnover rates

Increase your productivity

Improve employee attitudes

Decrease tardiness and absenteeism

Produce more highly skilled workers

Increase cooperation between your workers and supervisors

Reduce discipline problems

Develop a permanent plant-wide training capability

Enhance your company's image as a good place to work

EXTRAS

Technical assistance in preparing printed material

Technical assistance in preparation of audio-visual materials

Ongoing management consultant services

ADVANTAGES TO EMPLOYEE

Increased skills

Broadened promotional opportunities

Better identification with company goals

More effective relationships

Produce more highly skilled workers

Increase cooperation between your workers and supervisors

Reduce discipline problems

Develop a permanent plant-wide training capability

Enhance your company's image as a good place to work

EXTRAS

Technical assistance in preparing printed material

Technical assistance in preparation of audio-visual materials

Ongoing management consultant services

ADVANTAGES TO EMPLOYEE

Increased skills

Broadened promotional opportunities

Better identification with company goals

More effective relationships with co-workers, supervisors, and subordinates

HOW DOES SKILL IMPROVEMENT SYSTEMS WORK?

First, experienced problem-analysts work with employers to

- Identify productivity problems that may be training-related
- Define the kinds of training needed

Then training and curriculum specialists design training programs, write curricula, and provide in-plant training to meet your needs.

WHO PAYS FOR THIS SERVICE?

This service is free to you from the Ohio Bureau of Employment Services, with funds established by the United States Department of Labor.

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The following is a list of some of the organizations where Industrial Training Service has provided technical services and training programs:

CURTISS-WRIGHT
NEWARK HOUSING AUTHORITY
BLONDER-TONGUE
MONSANTO COMPANY
N.J. COLLEGE OF MEDICINE AND DENTISTRY
BLUE CROSS - BLUE SHIELD OF NEW JERSEY
MARRIOTT CORPORATION
THOMAS A. EDISON INDUSTRIES
HOFFMANN LA ROCHE
EAST ORANGE HOSPITAL
GENERAL GUMMED PRODUCTS
METAFRAME CORPORATION
GOTTSCHO COMPANY
PRUDENTIAL INSURANCE COMPANY
TROY CHEMICAL
GOURMET FOODS, INCORPORATED
RAGEN PRECISION INDUSTRIES
STANLEY TOOLS
GENERAL ELECTRIC
BELL TELEPHONE
ANNIN AND COMPANY
SHAW PLASTICS CORPORATION
CERRO WIRE & CABLE CORPORATION
EAST ORANGE PUBLIC SERVICE CAREER PROGRAM
QUINDAR ELECTRONICS
SCANDIA PACKAGING MACHINERY COMPANY

The advantages for employers participating in ITS upgrading and related programs are:

* **HIGHER SKILLED MANPOWER**
* **INCREASED PRODUCTIVITY**
* **BETTER TRAINED SUPERVISORS**
* **IN-HOUSE TRAINING CAPABILITY**
* **IMPROVED MORALE RESULTING IN FEWER PERSONAL PROBLEMS**
* **CLOSER EMPLOYEE IDENTIFICATION WITH COMPANY OBJECTIVES**
* **RESTRUCTURING OF JOBS AND DUTIES PROVIDING MORE EFFICIENT USE OF MANPOWER**
* **IMPROVED LABOR-MANAGEMENT RELATIONS**
* **IMPROVED INTERNAL COMMUNICATIONS**

FOR INFORMATION CONTACT:

Industrial Training Service
790 Broad Street
Newark, New Jersey 07102
201 – 648-3421

Unique upgrading training to meet manpower development needs

FIGURE 14

State of New Jersey
Department of Labor and Industry
NEW JERSEY STATE TRAINING AND EMPLOYMENT SERVICE
Affiliated with
Manpower Administration, U.S. Department of Labor

NJES ITS 081201 (R-4-72)

Industrial Training Service (ITS) offers you diversified skill building and upgrading programs with innovative approaches to developing manpower resources. Each makes it possible and practical to fill a specific training need in an effective and proven way.

In addition to providing your employees with higher job skill, ITS training develops self confidence and motivation - characteristics that are as important as knowledge of specific skills:

Here are the elements of the system:

1) Training is usually conducted in-plant.

2) Curricula is developed specifically for the particular job and manpower needs of the individual organization.

3) Traditionally lengthy curricula is reduced into short, high impact courses.

4) Participation is active. The emphasis is not on teaching, but on learning and using specific skills.

5) Training techniques in developing work group cohesiveness are utilized.

6) Learning is transferred. All skills acquired and developed are gradually transferred, during training, to the job.

7) The training program builds the self-esteem, confidence and motivation necessary to enable the worker to accept increased responsibility.

ITS PROGRAM COMPONENTS

Generally, training programs are developed in the following manner:

1) An ITS training consultant is assigned to assist the employer in analyzing training needs.

2) Skills training may be provided by a company representative, (foremen or skilled worker), an instructor from the N. J. Division of Vocational Education, or a private skill instructor.

3) The consultant assists the employer in setting up the program, and conducts the attitude development and interpersonal skills training.

4) Manuals, audio-visual aids and certificates of completion are included.

OTHER TRAINING SERVICES

ITS offers training in English as a Second Language (ESL), for those workers whose job and career opportunities are limited by a lack of fluency in English.

Supervisory skills training may be provided for foremen and supervisors; especially, as a forerunner to an ITS upgrading program. This training is particularly applicable to new supervisors or those who have never received formal training.

TECHNICAL SERVICES

For employers with problems affecting work force utilization and stability, ITS provides such services as:

JOB ANALYSIS – Job descriptions may be prepared for such purposes as recruitment, selection, training, job relationships, job transfers, promotion, job and employee evaluation, labor relations, and Affirmative Action Programs.

JOB RESTRUCTURING – Jobs may be analyzed and restructured in resolving manpower problems created by changes in products, equipment, materials, processes, and the labor market.

JOB CLASSIFICATION SYSTEM – A job classification system, may be developed that will serve to standardize job titles, establish lines of promotion and transfer, simplify record keeping, and establish a wage structure and job evaluation system.

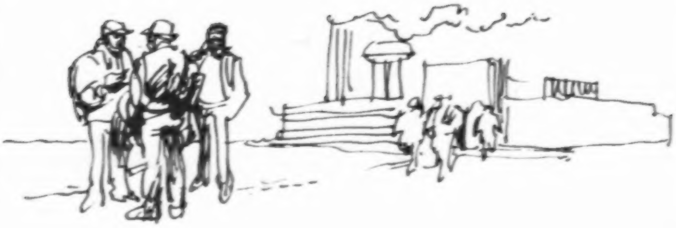
PERSONNEL AND RECORDS SYSTEM – Some of the materials which an employer may be assisted in developing are application records, employee service records, salary records, training records, skills inventory, turnover and attendance records.

ORGANIZATIONAL STRUCTURE – Job inventories, organization charts, process flow charts and job specifications may be developed to pin-point responsibility and formulate lines of authority and decision making policies.

TURNOVER AND ABSENTEEISM – A high rate of worker separations and absenteeism is costly. Turnover and absenteeism may be analyzed to identify problems, determine their causes, and recommend corrective measures.

UPGRADING
YOUR
WORKFORCE:

A Key
To
Productivity



Jim Burton thinks his job is stupid. Jock Ornoski calls the shop steward every time he's asked to do something different. Ben Washington is black and calls whitey's business a hustle. Rosa Gonzales is tired of typing. Lee Jackson shoots up heroin in the washroom.

They, and many others, would quit tomorrow for a better job.

They all want more money.

They couldn't care less about who the company serves or what it produces.

What are managers doing about it? What is the response in the personnel office, in the supervisor's shack, in the executive suite? Are managers blaming meddlers for all their troubles, thinking only about the income statement, cursing foreign imports and government regulations, union power and inexorable escalations in wage demands?

Not all managers.

Some are thinking more and more about their new employees, those who aren't accepting everything their fathers did, or those wearing beads and long hair, or those who refuse to make an extra effort or even to come to work every day.

These people problems are growing too

evident in most businesses to be ignored or written off as temporary. The pages that follow are aimed at managers who recognize the need for new responses to employee discontent, who are inclined to try new approaches in improving worker morale and output, who are seeking

- Higher skilled people
- Better workmanship
- Fewer discipline problems
- Ways to comply with Federal equal employment opportunity directives
- To curb turnover, absenteeism, tardiness
- To attract younger workers
- To improve response to training programs
- To lessen backlash against special efforts for disadvantaged employees

Most companies initiate special programs to improve some employees' jobs for one of two basic reasons—a severe need for higher skills that can not be satisfied by outside hiring, or a need to revise promotion

procedures to meet equal employment opportunity compliance requirements. But responses to these urgencies often have little bearing on the broader problems of the workplace.

Business needs a more productive, stable workforce. A key to meeting this need lies in making the company more valuable to the employee, and as a result the employee will be more valuable to the company.

How?

Just pay him more money?

Improve the benefits?

Train some for higher skills?

Go on a four-day workweek?

Offer tuition refunds to everyone?

Tear out the timeclocks?

Improve working conditions?

It's not that simple.

To make a lasting impact something more is needed, although shortrun improvement might be demonstrated by effecting any one of these changes.

What else is needed?

The most successful efforts to improve the reciprocal relationship of company and employee are *those which strive for a total work environment of openness and opportunity.* This atmosphere essentially broadens the concept of "upgrading" to include not only the improvement of employees' promotion potential, but the improvement of their participation potential.

This broad upgrading concept does not apply just to low-skill minority group employees. The interlocking nature of relationships in an office or on the shop floor means that a problem in one area can spark reactions in another. Every employee must be considered in the equations of productivity.

Productivity and People

Improving productivity has become a priority issue for the American people. When he recently appointed a National Commission on Productivity, President Nixon stated:

> *"Productivity in the American economy depends on the effectiveness of management; the investment of capital for research, development and advanced technology; and most of all on the training and progressive spirit of 86 million working Americans."*

Productivity is the major crucible in which the fortunes of competitive enterprise are tested. It is statistically expressed as output-per-manhour, but this hides its broader implications.

It can be affected by changes in the number of people in the operation, their pay, the process, the equipment, the product mix, the hours of work, the quality standards, and the work standards. When faced with productivity problems, managers too often respond by manipulating one or more of these factors – usually calling for tighter controls or greater automation – before attempting to deal with an even more basic cause of lagging productivity: *worker discontent.*

The discontented worker cannot be ignored or pacified with token gestures, and thoughtful managers are beginning to notice, on a broad scale, that new types of employees are not responding to traditional incentives.

The new worker is much better educated than in the past, presents the image and behavior associated with the affluent youth culture, and is increasingly at odds with the values of older workers.

Or, conversely, he may have far less education than other employees, come from a more deprived background, often from a minority group.

Or, he couldn't care less even about his own union local. Just that house in the suburbs, the new car, color TV, and the weekly paycheck.

Or, he is a she.

Adjustments to these new workers and a greater understanding of their values are imperative if managers are to continue receiving allegiance from their employees and to maintain high productivity.

The New Worker

The workplace does not exist in a vacuum, free from the strains that beset modern society. Hard work is an American institution and like many others—the schools, the church, even the family—is increasingly being challenged by various interest groups.

The Disadvantaged

Most managers now have on their payrolls people they wouldn't have dreamt of hiring several years ago. These people are often referred to as "disadvantaged," both black and white, hired either out of response to social pressures of the mid-sixties, or—more likely—because they were the only available labor pool easily tapped in an expanding economy.

While these workers, with special effort on their part and on the company's, may have been successful at the entry level of the occupational structure, they now feel blocked as criteria for advancement become tougher. As they become more aware and bitter that minority groups seem locked into the lowest level or poorest paying jobs, they have become less responsive to management's demands and less satisfied with just that toe-hold on the bottom rung of the occupational ladder.

The Young

Young people in all walks of life have been affected by an irreversible questioning of traditional values. While their attitudes now may be more subject to realism than the drop-out, anarchist phenomena of the late sixties, a vast change has taken place. Their outlook on life, from junior executives, to apprentice craftsmen, to beginning clericals, has changed to include other goals beyond binding their lives to a job or a company as their fathers did.

The Woman

Women's rights activity is just beginning to coalesce around the workplace, presenting entirely new challenges to the manager's imagination. The thrust of recent anti-discrimination laws and the heart of the proposed child care legislation clearly point to more pressure from women competing for men's jobs. This will disturb old relationships, create new problems, and add yet another ball for companies to juggle.

The Long-Service Employee

Special programs launched by companies in an attempt to motivate new workers have been a source of confusion and discontent among more senior men.

These long-service employees, whose allegiance to the firm and the older ways of doing things is the greatest, can be management's best allies in effecting change, or they can be a source of severe unrest if their life stake in the organization is ignored or abrogated just to placate a new interest group.

That's why opportunity must be considered in its broadest context, with personnel development activities extending throughout the organization and cognizance taken at all times of harmonizing the interests of disparate groups while achieving their goals and those of the company.

Some Suggestions

Each firm has its own set of problems, needs, and conditions. There is no one solution or set of techniques which every company will find satisfactory. However, it is useful to note some general areas in which change might be made and some of the specific techniques companies have used to improve employee skills, morale, motivation and promotion potential.

IMPROVED COMMUNICATION

Do employees really know what the company wants to achieve? Has there been any on-going reaffirmation of what the company does beyond a summary at the hiring office or an urgent message in a company newspaper?

Despite what managers may have thought in the past, people want to know what's happening, they want to know what their opportunities are. Do firms really know

what employees want? Is there, in a word, communication back and forth between managers and workers?

Communication is participation. It means that employees regularly know of the firm's new plans and have an opportunity to discuss these with management, know what bearing economic conditions have on their jobs, what career choices are open. And it means that management is sensitive to what workers want beyond bargaining table demands, what is creating instability, higher grievance rates and low morale.

- *Many companies provide regular off-line meetings in which employees can exchange ideas with their supervisors about job content, the need for process change or other production matters. One such firm has created a system in which groups of employees meet regularly with an elected representative who carries to a company-wide forum inquiries on all aspects of the firm's operations, services, products, facilities and community relations, and who provides a vehicle for communication down from top officials.*

- *A major machine tool company tabulates indicies of worker aspirations to heighten management's awareness of the occupational desires of the workforce. These data are obtained in periodic interviews between supervisors and employees in which each worker notes the kind of job or departmental transfer he would like.*

- *Employees at a large government installation are provided with easy-to-read handbooks that describe the major job clusters, chart career alternatives, outline qualifications for job advancement and explain training opportunities.*

- *A New York hotel has stationed counselors in the employees' cafeteria during the* *lunch hour. These counselors have complete listings of all job openings and attempt to satisfy the employees' occupational desires either by placement or by referral to a training program.*

- *Personal letters from one company are mailed to each worker's home informing him of all new training opportunities. This individualized effort was found far more effective than bulletin board postings, perhaps because it brought domestic pressure to bear on the decision-making process.*

STRUCTURAL CHANGE IN THE COMPANY

Meaningful communication can bring meaningful ideas about process change or modification in promotion structure and work loads. "Job restructuring" and "job enrichment" or "enhancement" are, to be sure, difficult undertakings, but firms that have implemented these concepts have often reaped impressive rewards in increased productivity. The phrases should not be disregarded as mere catchwords from a personnel textbook.

A new round of occupational analysis in a plant usually reveals inequities which might have been disturbing workers. If more avenues for advancement can be legitimately devised, fewer people will look elsewhere for better jobs.

And structural barriers to promotion increasingly are the focus of investigations into patterns of unintentional racial discrimination. Educational standards, training requirements and test procedures for many jobs have been ruled invalid, and many companies have for the first time tapped their own personnel resources to fill skilled positions.

- *A Cleveland foundry, facing possible shutdown due to lagging productivity, totally reorganized its occupational structure into seven basic skill clusters and retrained supervisors and workers in each group.*

- *A group of marginally productive, unskilled laborers at a Texas refinery were protected from layoff by seniority. The laborer position, not linked to a progression structure, was dropped and a trainee position created as the first step in a plant-wide occupational progression. The trainees were given remedial education and skill training in conjunction with their new positions.*

- *Rigid apprenticeship programs were dropped by one firm in favor of a more flexible progression of job categories linked to promotional practices rewarding workers as their abilities improve.*

- *A West Coast electronics firm provides freedom from the rigidities of assembly line production by emphasizing unit construction. Employees are encouraged to "operate by objectives" and use their own judg-*

ment in organizing their work as long as quality and time standards are met.

- *In one plant with severe morale and productivity problems, a complete overhaul of the production process was made. Jobs were evaluated by the workers themselves and re-rated for importance in consultation with supervisors and middle-management. As a result, the occupational structure was stretched out at both ends to provide a more effective upward mobility system.*

BROADENED TRAINING OPPORTUNITIES

Formalizing the company training function can be the first step in the orderly development of employee growth efforts.

In many companies the central training department is too often concerned solely with management development while skills training is left, with relatively little supervision, to the production department. Giving the company training department a constructive role in the skills training area might result in improved and broader training programs for the production workforce.

Both in-house and outside training must be tacitly linked to promotion opportunity and job enhancement if they are to be viable. In addition to skills training, companies are increasingly faced with the need to provide basic and remedial education in order to qualify certain groups of employees to move into the higher levels of the occupational structure. This training costs money not easily pegged to returns, but there are few industries which can survive today with low literacy levels in the production workforce.

- *A southern paper company enlisted the help of an outside consulting firm in conducting a remedial program in reading, mathematics and communication skills for a group of functionally illiterate woodyard laborers blocked from promotion. The program consisted of 183 hours of programmed instruction conducted on the employees' own time.*

- *Tuition refund programs are available in many companies, with a small but growing number paying that tuition at the outset rather than forcing employees to handle the high front-end costs of outside education.*

- *The Personnel Development Center at a midwestern manufacturing concern offers employees a wide variety of educational and training services ranging from classes in simple blueprint reading to five-year cooperative programs, in conjunction with local universities, leading to engineering degrees. The Center also maintains a complete guide to training and educational re-*

sources in the area and assists in workers' enrollment.

- *Because of a lack of trained manpower in the area, a New Orleans shipyard, which had traditionally done its own training, was able to intensify and formalize its training program with the help of a NAB-JOBS upgrading contract. The training is all conducted in-plant, on company time.*

An Atmosphere of Openness and Opportunity

Real communication – back and forth – job restructuring, job enrichment, all supported by training and promotion of educational opportunity – these are the prime ingredients which will lead toward the more productive workforce. These approaches to encouraging greater worker participation in meeting the goals of the company essentially depend on a two way flow of ideas and information on how the company's product or service might be produced more effectively.

This might call for more skill training or extensive personnel management training for supervisors. It might call for a redefinition of management's relationship with organized labor. It might mean a change in the production process. It usually means increasing a worker's estimate of the value of his job. It calls for institutionalizing new ways that ideas can be exchanged within groups and between levels of responsibility. Most of all, it means finding out what employees want and maximizing their potential for achieving it consistent with the company's goals.

A company should be prepared for various kinds of suggestions from employees when it genuinely opens up communications. Although some might be unacceptable, many firms have found that by implementing some of the suggested changes, worker morale has been markedly improved.

Implementing Change

The four-day workweek may be a viable experiment. Or allowing employees to work their eight hours in any twelve hour period. Many differences between the conditions of hourly and salaried employees may be expendable, such as time clocks, executive parking spaces and separate cafeterias and restrooms.

Change of any kind usually comes slowly as one innovation builds upon another. Implementation of programs that strive to upgrade the worker's estimation of his job and his importance to the company is not easy.

Most often, directed change within any organization requires stepping on someone's toes. The person attempting to implement change needs the solid support of top management to assist him in overcoming the reluctance of fellow employees. Even with this support, change must proceed incrementally. While there may be errors or time lags, as each change proves successful, the organization will become more responsive to the needs of today's workers and the continuously shifting currents of economic reality.

Since special programs are not totally replicable from firm to firm and hard data on the results of such programs is often unavailable, those seeking change within the firm may need help in designing a program to fit the company's particular needs.

Photographs number three and five on inside front cover courtesy of the Amalgamated Clothing Workers, AFL-CIO.

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Help Is Available

There are private consultants who specialize in personnel management and there are new levels of capability developing in public agencies, such as in some units of the State Employment Service. Government aid is becoming more generous and reimbursement formats more responsive to company need as greater cognizance is taken of varied techniques, some more flexibly structured than required in the past, that individual companies feel most appropriate.

For Further Information:

to assist project staff in making initial presentations to employers. Another useful marketing aid is a series of model or form letters to assist the staff in routine correspondence with employers, thereby insuring a uniformly high quality of written communication. These standard formats are particularly helpful if agency management requires prior approval of correspondence with employers. Some types of routine letters might include:

- -- Introductory explanation of program and request for appointment
- -- Confirmation of appointment
- -- Thank you letter following a visit
- -- Response to general inquiries ~~about~~ program
- -- Letter of agreement

Production of Marketing Aids

Most states have facilities for preparing and printing publicity materials. If no one on the staff is qualified to prepare a brochure, the state or agency public relations department might be of assistance, or, if required, the services of an outside public relations agency could be secured.

General Marketing Activities

Broad exposure of the program is possible through a variety of techniques including speeches, effective use of the media and employer surveys. Some specific suggestions are outlined below:

- -- Oral Presentations: Speeches to local employer groups, civic organizations and trade associations and participation in workshops and conferences can be an effective public relations tool. While this type of group marketing does not always achieve immediate or visible results, it can expose the program to a broad audience at a low cost. These presentations should be kept informal and program representatives should encourage questions and participation from the audience. Although group marketing can be done early in the outreach campaign, it is most effective when several programs have been completed and these successes used as illustrations. The testimony of "satisfied customers" has great credibility with employers and can often be instrumental in convincing other businessmen to give the program a chance.

- Television or Radio Exposure: Members of the agency management and project staff should seek to be interviewed on local news or talk shows to explain the program's goals and the services available or to highlight a successful company program.
- Coverage in Newspapers, Civic Journals, and Local Trade Publications: Press releases may be written and distributed describing innovative or successful programs, provided that the client company approves.
- Direct Mail Campaigns or Surveys: Mass mailings of brochures accompanied by letters or reply cards can be used to advertise the project and to define the market, particularly in areas with large numbers of companies. In addition, mail surveys of training needs can also serve to identify company interest. Figure 16 is a copy of a survey instrument used by the Vermont Employment Service.

FIGURE 16

STATE OF VERMONT
DEPARTMENT OF EMPLOYMENT SECURITY
MONTPELIER, VERMONT 05602

January 5, 1972

Dear Vermont Employer:

Upgrading Training is receiving a considerable amount of attention in management circles these days. Its importance and relevance to firms of all sizes will become increasingly evident in the very near future in view of social, economic and labor condition forecasts.

The enclosed brochure is intended to inform you of the Upgrading Training program being conducted in Vermont and to invite your firm to participate in this project.

In order to gauge the needs for and response to the program by Vermont business, we are asking for your cooperation in completing and returning the questionnaire below as soon as you have read the brochure and have had a chance to evaluate its applicability to your organizational needs and objectives.

Thus, we request that you simply refold this letter, staple it together and drop it in the mail. No stamp is needed.

Your reply is important to us. Please take one minute to answer the questions below. Even if you do not wish to participate in the program, indicate this below and KINDLY MAIL THIS LETTER BACK!

If this letter has reached you at an out of state address, please forward it to your Vermont address.

Thank you in advance for your cooperation.

Sincerely yours,

John M. White, Director
Vermont State Employment Service

For what positions in your organization do you have the most difficulty in finding and keeping trained workers? ______________________________

Do you currently conduct any formal skills training programs? __________

☐ I am interested in learning more about Upgrading Training and would be pleased to discuss how we can benefit from this program.

☐ I am not interested in participating in the Upgrading Training program for the following reason: ______________________________

Technical Services

TECHNICAL SERVICES

Drawing on the agency's experience in providing industrial services, and encompassing a broader approach required by today's industrial society, the program will:

- *Work with employers to identify in-plant manpower related problems and recommend appropriate solutions;*
- *Arrange for requisite services either through the resources of the program or in concert with cooperating community agencies;*
- *Transfer the cooperative relationship between the program and the employer to other units of the Employment Service.*

TECHNICAL SERVICES

The process of non-regulatory in-plant intervention by a governmental agency is both complex and sensitive. While many managers willingly accept the assistance of private management consultants, there is substantial resistance to allowing government respresentatives access to company facilities, personnel data and employees. Despite this, State Employment Services have had considerable experience and success evoking employer confidence in their ability to be of assistance in certain in-plant matters. The Industrial Services program, the testing effort and the more recent job coaching program for MDTA graduates all require that SES personnel have access to the worksite and to company employees.

The present SES in-plant activities are generally of an advisory nature. The analytical procedures and particularly the service approach advocated in this section requires a more operational orientation. The staff of an Employer Technical Services program may, if company needs dictate, assume training and consulting roles which in other situations might be the responsibility of company personnel. They will undertake these activities, not to replace a company person, but to provide a service either beyond the technical capabilities of present company staff or the available resources of the organization. Once the service package has been tailored for the company and tested by ETS project staff, it is intended that the materials and capability be transferred to the client organization.

Key to the success of an Employer Technical Services program is the process of achieving employer cooperation and gaining acceptance by the employees of the organization. ES staff working in the plant must realize that as outsiders they may be viewed with suspicion by managers, workers, and union representatives. Management must be kept aware of the goals and nature of the activities taking place in their facilities, employees must be informed of the reasons for their participation in the program both by their managers and by the ETS staff, and at no time should program officials be caught in disputes between these parties. All this requires a low-profile, professional approach in which care must be taken to present recommendations in a constructive manner and to avoid pejorative statements of fact. Since business organizations are accustomed to receiving well-organized and highly literate reports, written communications between ETS program officials and clients must reflect these standards. Finally, as the program staff becomes more experienced and confident, they will tend to accept the challenges presented by the more complicated problems of manpower management. While this "reaching out" is a healthy response, program managers should see that the staff does not overreach their capabilities and thereby become embroiled in situations that might reflect poorly on the SES.

The in-plant analysis and service approach advocated in this section is well within the capabilities and mandate of a State Employment Service. The presentation is divided into two major components:

-- Problem Analysis and Recommendations: Suggestions for an in-plant research methodology, data collection and analysis procedures and techniques for the development of recommendations to be transmitted to client company officials.

-- Technical Assistance: Examples of how traditional testing, occupational analysis and training techniques, along with approaches for linking with other manpower service programs, can be used to ameliorate company manpower management difficulties.

IN-PLANT PROBLEM ANALYSIS

Purpose: To identify those aspects of a company's process and environment that do not contribute to the efficiency of the organization or the well-being of its workforce, and then to recommend remedial action.

Overview

Industrial organizations are generally loathe to open their records to any outside organization. Personnel and production records are carefully guarded, particularly if management feels that some competitive secret might be divulged. Similarly, many employers are wary of permitting their workers to talk about company problems fearing that there may be disclosures of discriminatory practices or infractions of labor standards laws. In order to collect information on the nature of manpower problems in the plant, the Employer Technical Services project staff must overcome this resistance and establish a level of trust with management. In this regard the employer should be kept informed of all research and data collection activities, and the program staff should be well-prepared and knowledgeable about the industry and its occupational structure.

Effective research requires a consistent approach. This uniformity is established through a research structure sufficiently flexible to conform to the peculiarities of an individual organization and inclusive enough to cover all potential problem areas. The research structure advocated here classifies problems into four major areas*:

-- Skill/Knowledge: Problems resulting from inadequate training procedures and educational opportunities for workers.

-- Attitude: Problems resulting from difficulties in interpersonal relationships among supervisors, workers and managers.

---

* A more detailed exposition of these four problem areas is provided in the Technical Assistance unit of this section starting on page 113.

- -- Environment: Problems resulting from unsafe or unhealthy physical conditions in the plant.
- -- Structure: Problems resulting from irrationalities in the occupational structure, job content and work rules.

These problem areas tend to be related and overlapping, and it is quickly admitted that the broad categories are arbitrary. Logical conventions for assigning a particular problem to a classification will evolve from the experience of the program staff.

The research and problem analysis techniques offered below are intended as a general approach to be fitted to the needs of the program and the company being studied. The scope and intensity of the problem analysis effort in each case will depend on the best judgments of the research staff.

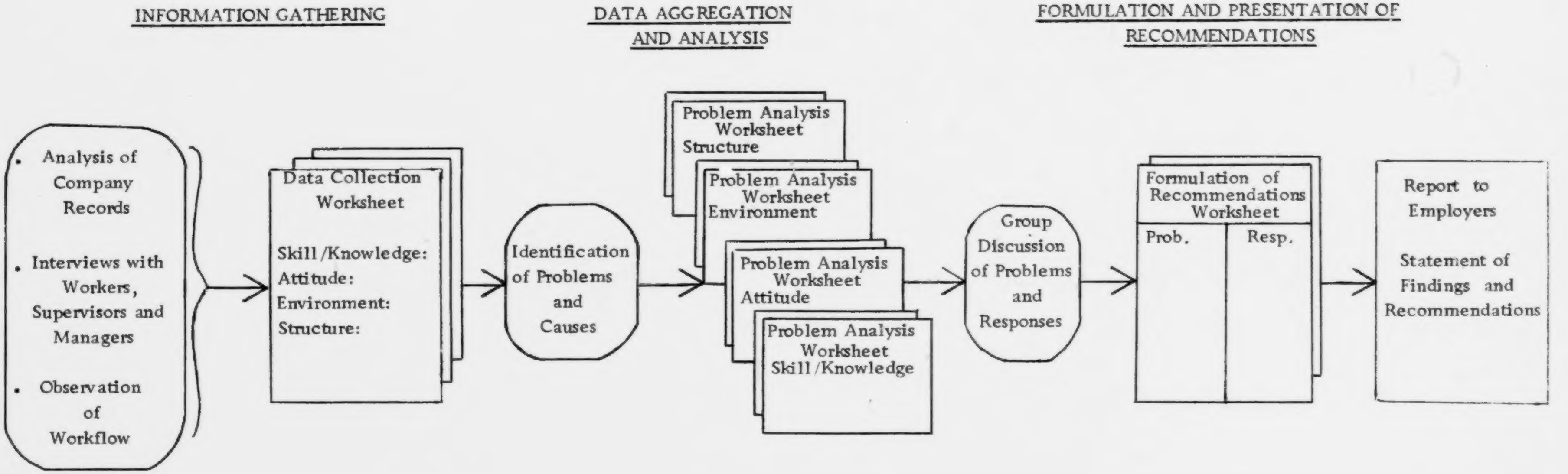
The in-plant problem analysis and recommendation process, as diagrammed in Figure 17 and further delineated in Table 5, may be divided into four phases: Information Gathering; Data Aggregation and Analysis; Formulation of Recommendations; and Presentation of Findings and Recommendations. The material below describes each aspect of this methodology in some detail. However, before proceeding to a description of techniques, a discussion of staff assignment for the analysis process is indicated.

The most successful staffing structure for in-plant analysis is a task force. This insures the availability of a variety of skills and experiences which one person probably would not possess. But perhaps more importantly, a team approach will engender varying perceptions of the situation under study and thereby enrich the analysis process and the formulation of recommendations. The task force should have an appointed team leader or coordinator who is responsible for the development of the methodology, conduct of the study and quality of the outcomes. The size of the team and the assignment of particular staff will depend on the perceived magnitude of the job and the personnel available at that point in time.

FIGURE 17

IN-PLANT PROBLEM ANALYSIS

PROCESS FLOW


INFORMATION GATHERING
DATA AGGREGATION AND ANALYSIS
FORMULATION AND PRESENTATION OF RECOMMENDATIONS
Analysis of Company Records
Interviews with Workers, Supervisors and Managers
Observation of Workflow
Data Collection Worksheet
Skill/Knowledge:
Attitude:
Environment:
Structure:
Identification of Problems and Causes
Problem Analysis Worksheet Structure
Problem Analysis Worksheet Environment
Problem Analysis Worksheet Attitude
Problem Analysis Worksheet Skill/Knowledge
Group Discussion of Problems and Responses
Formulation of Recommendations Worksheet
Prob.
Resp.
Report to Employers
Statement of Findings and Recommendations

Collect data in note form using prepared check-lists or interview guides.

Transfer notes to Data Collection Worksheet--make one worksheet for each data source.

Using Data Collection Worksheet, identify problem indicators and possible causes.

Record generic problem statements with supporting indicators and counter-indicators on Problem Analysis Worksheet. List probable cause of each problem.

Discuss problems, causes and possible responses.

List problems, causes and possible responses on Formulation of Recommendations Worksheet.

Write report to employer outlining findings, presenting recommendations and proposing service package, if one is indicated.

TABLE 5

IN-PLANT ANALYSIS OVERVIEW

	INFORMATION GATHERING	DATA AGGREGATION AND ANALYSIS	FORMULATION OF RECOMMENDATIONS	PRESENTATION OF FINDINGS AND RECOMMENDATIONS
Purpose	To collect those key items of information that will permit an accurate assessment of company manpower problems	To assemble and analyze the collected data to identify valid and significant in-plant problems and their probable causes	To formulate appropriate responses to the delineated problems	To present a concise, literate statement to the employer containing an abstract of the problems, recommendations for remediation, offers of assistance and statement of mutual expectations
Instruments	Preliminary Research Data Worksheet; Data Collection Worksheet	Problem Analysis Worksheet	Formulation of Recommendations Worksheet	
Techniques	SES Record Review; Company Record Review; Personal Interviews; Process Observation	Qualitative analysis; Frequency analysis; Discussions in committee	Committee Discussions; Brainstorming	Individual or group writing
Outcomes	Problem statements organized by four classifications	Lists of significant in-plant problems and causes	List of significant problems with suggested responses	A report to the employer outlining findings and recommendations

Information Gathering

There are two phases in the information gathering process: 1) Preliminary Preparation, and 2) In-Plant Data Collection.

Preliminary Preparation

The following procedures should be undertaken by the research team prior to any significant in-plant activities:

- Prevenient Research

  A preliminary research effort should be undertaken so that the members of the research team will appear professional and knowledgeable in their contacts with company officials and workers. This activity, which is intended to provide the staff with background information on the industry, processes, occupational structure and history of the organization under study, generally involves library research, interviewing and a review of State Employment Service files. Material concerning an industry and its production process can usually be found in the SES library or obtained from industry associations and training institutions. Information on the occupational structures of a particular industry is available in several publications from the Bureau of Labor Statistics including: *The Industry Area Wage Survey Series*, *Tomorrow's Manpower Needs*, *The Occupational Outlook Handbook* and special studies periodically done by Regional BLS offices on selected industries. Also, ES 511 employers file, which is generally maintained by the Employer Relations Unit, often has occupational information and data on the types of openings the company has listed with the ES. The company's collective bargaining agreements will provide not only an accurate picture of the occupational structure for non-exempt positions but a description of the formal progression structure for these occupations. Perhaps the best source for information concerning job content is Volume I of the *Dictionary of Occupational Titles*. Other sources include the files of the Occupational Analysis Unit, which contain company job descriptions developed in support of testing, training and job order writing and the historical files of the agency's Job Bank system.

Background material on the history of the company under study can be found in the 551 files and on the *Company Information Form* completed for each company during the outreach phase. Also, the responsible employer relations person may have valuable insights to complete the picture. Figure 18, the *Preliminary Research Data Collection Form*, is a suggested device for collecting the information and disseminating it to the team members. The top section of this form is identical to the *Company Information Form* (Figure 6, page 60) so that the data collected during the outreach phase may simply be transferred for use in this new context. It is advisable at this point to create a company file to store all relevant material on the service effort.

- Development of a Research Design

The goals, focus, and scope of the in-plant data collection process should now be defined on the basis of the preliminary research findings and the decisions made during marketing discussions with company officials. Many managers will have reasonably accurate perceptions of company problems and their causes and may request that research and analysis activities be confined to the particular area of perceived difficulty. Other company managers willingly admit that they have only a poor understanding of the problems afflicting their organization, in which case the mandate for the research approach is generally quite broad and cooperation and company support substantial. The research team's task in both the situations outlined above is to identify accurately the nature and causes of the problems, formulate recommendations and present them to a receptive management. Unfortunately, there is a third case where managers have an inaccurate understanding of company problems and their causes. This often presents the research team with the difficult task of reporting the truth without alienating the client.

The research design should include an identification of the organizational units to be studied; a proposed schedule for research activities; a listing of company records to be reviewed; and a delineation of the numbers of people to be interviewed at each level of the organization. Interview outlines, checksheets or survey instruments for each group to be contacted should be prepared.

- Administrative Procedures

Prior to beginning research activities within the plant, several steps can be taken to apprise company management of the process:

FIGURE 18

PRELIMINARY RESEARCH DATA COLLECTION FORM

PART I - INFORMATION TO BE TAKEN FROM THE COMPANY INFORMATION FORM

COMPANY NAME:

PARENT COMPANY NAME, IF ANY:

TELEPHONE NUMBER:

COMPANY ADDRESS (AND DIRECTIONS ON HOW TO GET THERE, IF NECESSARY):

____

____

COMPANY EXECUTIVE NAME:

TITLE:

OTHER CONTACT NAME:

TITLE:

PRODUCT OR SERVICE:

SIZE OF WORKFORCE:

Total ________ Minority ________

Male ________ Female ________

DOES COMPANY PLACE JOB ORDERS WITH ES?

Yes, frequently ☐ Yes, occasionally ☐

No, but did previously ☐ No, never ☐

IS COMPANY ON THE ES DO NOT SERVE LIST?

Yes ☐ No ☐

PART II - INFORMATION TO BE COLLECTED FROM FILES AND LIBRARY

DESCRIPTION OF MAJOR PROCESSES (Involved in Producing Goods and Services):

OCCUPATIONAL INFORMATION

Company Job Title	DOT Title	DOT Code	Salary

COMPANY BACKGROUND:

-- A responsible management official should be identified to act as a liaison between the research task force and the company;

-- Management officials should be given access to all interview outlines and data collection instruments, and provided with an explanation of their purpose and use;

-- A request should be forwarded to management for permission to question company personnel and for access to those production records that are required for the research activity;

-- If the plant is unionized, management should be asked to inform the union of the proposed study;

-- After approval of the research activities by management, administrative arrangements for access to records and company personnel should be made;

-- A joint management-ETS project team should brief supervisors whose departments will be affected on the methods and goals of the study. At this meeting, supervisors should be encouraged to articulate their feelings concerning the study and its possible impact on the morale and productivity of their workers. It may be desirable to formally notify the workers who will be involved to avoid misunderstandings, apprehension and suspicion. This can either be done through the supervisor or by a written communication to each worker.

In-Plant Data Collection

Once the preliminary preparations are completed, the data collection phase of the Information Gathering process can proceed.

• Review of Company Records

Company personnel and production records can be important sources for the identification of present or potential problems. Table 6 outlines some of the types of records that may be reviewed and the items of information that could be indicative of manpower related problems. When records are available, the review should precede the in-plant interviewing. The insights gained from the record review can serve to focus the interviews on the causes of apparent difficulties. Problems uncovered by the record review can be recorded directly onto a *Data Collection Worksheet*, Figure 19; the data should be recorded on the sheet in the form of short problem statements.

- Personal Interviews

Often the comments and insights of supervisors and workers can serve to further explain problem indicators found during the record review phase. And, if a company does not wish to open its records to the research team, the interview process must often serve as the sole data collection mechanism. Several steps are required for successful in-plant interviewing:

-- If arrangements were not completed for the interviewing process during the Preliminary Preparations phase, they should be made at this time through the designated company contact person. These arrangements include identifying the departments to be surveyed, securing space for interviews, scheduling all interviews with selected employees and insuring that company personnel are properly notified about the purpose and methods of the survey.

-- The next step is the interviewing of appropriate managers, supervisors and production workers. The number of people to be interviewed at each level will depend on the size of the organization, the available program resources, and the apparent complexity of the problems. All levels of the organization should be touched.

-- The interviews should be conducted on company time and scheduled, when possible, during slack periods. Experience has indicated that interviews are best conducted in a quiet room, away from the production process. Further, it has been found that rapport can best be maintained if the interviewer does not have to pause to record the responses. It is therefore desirable to have two reseachers conduct the interview -- one to ask the questions and the other to take notes. It is important that each interview begin with an explanation of the process so that the interviewee understands what is expected. Interviews with managers often last up to an hour, with half that time required for supervisors and production workers.

FIGURE 19

DCW # __________

DATA COLLECTION WORKSHEET

COMPANY NAME: __________

DATA SOURCE:

Name of Company Record or Interviewee: __________

Fill Out For Interviewee Only:

Position in Company __________	Department __________
Lenght of Service __________	Salary Level __________
Race __________	Approximate Age __________
Previous Employment __________	

Skill/Knowledge Problem Indicators

Attitude Problem Indicators

Environment Problem Indicators

Structure Problem Indicators

FIGURE 19A

DATA COLLECTION WORKSHEET

DCW # 2

COMPANY NAME: ACME, INC.

DATA SOURCE:

Name of Company [✓ Record] or Interviewee: Health and Safety Records

Fill Out For Interviewee Only:

Position in Company ______ Department ______

Lenght of Service ______ Salary Level ______

Race ______ Approximate Age ______

Previous Position ______

Skill/Knowledge Problem Indicators

-- 12 employee injuries in last year resulting from operating equipment with safety guards removed

-- 2 incidents of forklift trucks being driven off end of loading platform

-- 10 workmens comp claims for back injuries resulting from lifting heavy objects

Attitude Problem Indicators

--

Environment Problem Indicators

-- 15 accidents in last 6 mos. involving slips on oily floors in machining dept.

-- Company has failed 5 state safety inspections in last 7 years because of poor maintenance procedures

Structure Problem Indicators

TABLE 6

RECORD REVIEW GUIDE

RECORD	DATA ITEM	PROBLEM INDICATOR	POSSIBLE PROBLEMS
PERSONNEL RECORDS	Average age of workforce	Low average age High average age	Excessive turnover Future replacement problem
	Typical entry ports	Many entry ports in the higher skill jobs	Poor training/dependence on external labor market rather than internal upgrading
	Average time in job	Unusually long tenure in entry or low level jobs	Lack of progression structure/discrimination
	Personnel evaluation	Many poor ratings	Attitude problem/lack of proper training
	Transfers	Many requests to transfer to new departments	Poorly trained supervisors in certain departments
	Exit interviews and dismissal reports	Complaints of lack of a future, poor pay, incompatibility with co-workers and supervisors	Attitude problems/poor training procedures or lack of a career progression/non-competitive pay rates, poor supervisory practices
	Formal grievances	Recurrent grievances in particular department or occupation	Problems with work rules, working conditions and supervision
ATTENDANCE RECORDS	Patterns of attendance	High absenteeism rate	Morale problem/unhealthy working conditions
	Pattern of lateness	Excessive lateness	Morale problem/transportation difficulties
	Overtime levels	Costly excessive overtime	Productivity problem/inefficient workflow
HEALTH AND SAFETY RECORDS	Rates for accident insurance	Increases in rates	Unsafe working conditions/lack of safety training/unrealistic piece rates
	Sick leave levels	High levels	Unhealthy plant conditions/morale problems
	Accident reports	Excessive in number	Unsafe working conditions/lack of safety training/unrealistic incentive rates
	Safety inspection reports	Unsatisfactory reports	Persistent unsafe conditions/poor maintenance procedures/poor safety training
PRODUCTION RECORDS	Work piece rate	Workers not reaching incentive rate	Unreasonable rate/inadequate training/poor supervision
	Quality control rejection rate	High rejection rate	Inadequate training/employee morale problem
	Scrap rate	Large amounts of scrap	Inadequate training/supervisory difficulties
	Unfilled orders	Large number unfilled	Communications difficulties/inefficient workflow

The substance of the interviews will depend on apparent organizational problems, desires of management and decisions made during the research design phase. Where ever possible interview questions should be parallel for all levels of organization. That is to say similar questions should be directed to all interviewees so that different perceptions of the same issue can be elicited. However, the interview outline should be kept flexible enough to expand or pursue whatever appears to be a fertile line of questioning. For example, if one worker complains that incentive rates are too high, other workers might be questioned on the rate issue to determine the validity of the complaint. Sample interview questions, included at the end of this section in Exhibit A, are offered as examples which may be useful in developing interview instruments. Interview responses should be recorded in note form, and transferred as soon as possible to a *Data Collection Worksheet* in the form of precise problem indicator statements (see Figure 20).

Observation of Process

At some point in the in-plant information gathering process, generally after the interviewing has been completed, it is desirable to spend some time at the worksite observing the production process. This provides a context in which the company record data and interview responses may be better understood. If possible, some observation time should be spent on each operating shift and during one shift change. It is helpful if a company representative can accompany the observer to explain processes and work rules that may be unclear.

Aggregation and Analysis

Once the in-plant information gathering has been completed, the collected data must be organized into a structure that will facilitate the identification of significant problems and pinpoint probable causes.

The data at this point has been recorded in the form of short statements organized by problem classification on series of *Data Collection Worksheets*. Each *Worksheet* represents all information concerning alleged problems from a single source.

FIGURE 20

DATA COLLECTION WORKSHEET

DCW # 3

COMPANY NAME: ACME, INC.
DATA SOURCE:
Name of Company Record or Interviewee: Rose Hiller

Fill Out For Interviewee Only:
Position in Company machine operator
Department machining
Lenght of Service 12 years
Salary Level $3.75 hr.
Race white
Approximate Age 47
Previous Position assembler

Skill/Knowledge Problem Indicators

Attitude Problem Indicators

-- management does not care about comfort of workers

-- has bid several times on a foreman's job but was passed over, she feels, because she is a woman

Environment Problem Indicators

-- maintenance staff does not clean her area except when she complains

Structure Problem Indicators

-- incentive rates set too high — must ignore safety measures to achieve incentive pay

In order to prepare this information for analysis all data must be sorted into generic statements of significant problems within the four classifications. Generally this is accomplished in committee by the research team. The coordinator asks each team member to read down the list of problems on each of the *Data Collection Worksheets*. The full committee is then canvassed to determine whether other data sources corroborate the problem statement.

The usual determinent for classification as a significant problem is the frequency with which it appears in the aggregation. In addition, the research team members will be able to add qualitative input based on their memory of the context in which the statement was made, the intensity of a statement made by an interviewee and/or the magnitude of a statistic gleaned from company records. If the problem appears significant, a short generic statement of the problem, followed by supporting indicators, is prepared and written on the appropriate *Problem Analysis Worksheet*, Figure 21. In order to test the validity of an apparent problem, the committee is recanvassed to determine whether there is any data that contradicts the problem statement. Contradictory evidence, termed counter-indicators, may be uncovered in the records check, in interviews with other employees or managers, or may be indicated by the absence of corroborating interview responses.

If there appears to be a valid counter-indicator, a short statement of the contradiction, followed by supporting data, is prepared and written directly across from the problem statement on appropriate *Problem Analysis Worksheet*. When this has been completed the team is again canvassed to develop a probable cause statement for each listed problem. In the event that there is a strong counter-indicator, the team must decide both the validity of the problem statement and the reasons for the counter-indicative data.

It is admitted that this approach is perhaps an overly ornate system for in-plant problem analysis. ETS program analysts may find it desirable to simplify the process as they become more familiar with the steps involved in data collection and problem identification.

FIGURE 21

PROBLEM ANALYSIS WORKSHEET

Company Name: ____________________

Problem Classification: ____________________

Generic Problem Statements and Supporting Indicators	Counter-Indicators	Probable Causes

FIGURE 21A

PROBLEM ANALYST'S WORKSHEET

Company Name: ACME, Inc.

Problem Classification: Skill/knowledge

Generic Problem Statements and Supporting Indicators	Counter-Indicators	Probable Causes
• HIGH ACCIDENT RATE on LOADING DOCK -- 2 fork lift accidents -- 10 W.C. claims	NONE	• No safety training provided for loading dock staff

FIGURE 21B

PROBLEM ANALYSIS WORKSHEET

Company Name: ACME, Inc.

Problem Classification: Environment

Generic Problem Statements and Supporting Indicators	Counter-Indicators	Probable Causes
• Inadequate janitorial services in machining dept. -- 15 accidents in last 6 mos. due to slips on oily floors -- Company has failed 5 state safety inspections in last 7 yrs. because of poor maintenance procedures -- all janitors interviewed complained that they were OVERWORKED.	• JANITORS clean area -- 3 janitors said machine operators were unnecessarily sloppy — they try to keep area clean but can only do so much.	• janitorial unit understaffed

Formulation and Reporting of Findings and Recommendations

At this point in the process the team has developed a series of generic problem statements with associated causes. Several of these statements may have counter-indicators which question the validity of the problem. The committee must now determine the validity of each problem statement and propose ameliorating responses.

The research task force, in committee, discusses the nature of each problem statement to determine its validity and significance. The problems that appear valid should then be transferred to a *Formulation of Recommendations Worksheet*, Figure 22.

Developing Programmatic Responses

Specific programmatic solutions are developed and recorded on the worksheet across from the appropriate problem statement. These recommendations include services to be provided by the ETS program, actions to be taken by the company and the identification of appropriate community resources.

The research team will develop a series of recommendations based on their knowledge of the company, the receptivity of management and the service capabilities of the SES and other community agencies. This is accomplished in committee through a group discussion process. The exact nature of the recommendations will depend on the conditions in the plant and the causes of the problems. In the final unit of this section are a number of Problem/Response Abstracts which may assist analysts in developing recommendations.

Preparing the Report for the Employer

A document communicating the findings and recommendations resulting from the in-plant analysis should be prepared. This report should contain the following items:

FIGURE 22

FORMULATION OF RECOMMENDATIONS WORKSHEET

Company Name: ____________________

Statement of Problem and Cause	Proposed Response
Skill/Knowledge	
Attitude	
Environment	
Structure	

FIGURE 22A

FORMULATION OF RECOMMENDATIONS WORKSHEET

Company Name: ACME, Inc.

Statement of Problem and Cause	Proposed Response
Skill/Knowledge HIGH Accident rate on loading dock — no safety training provided for loading dock staff.	ETS program will provide one cycle of safety training for the loading dock staff
Attitude	
Environment Inadequate janitorial services in machining department	RECOMMEND THAT THE company hire 2 additional janitors for both shifts.
Structure	

-- Statement of Background and Methodology: Descriptive information on the firm, a statement of management's original perception of the organization's problems, and a description of the research methodology.

-- Findings of Information Gathering Phase: Highlights of the record review, interviewing and process observation efforts.

-- Statement of Significant Problems: Concise statements of the identified problems in each of the four classifications.

-- Plan for Remedial Action: A series of programmatic responses offered to correct identified problems. The recommendations are grouped into three sections: 1) actions to be taken by company; 2) services to be provided by the ETS program; and 3) services to be provided by outside agencies.

-- Statement of Expectations: In the event that the proposed responses include a service component to be provided by the ETS program or a cooperating agency, the mutual responsibilities of the firm and the organization providing the service should be delineated. These might include such items as: a statement of training program substance; hours of training; availability of facilities and resources; training schedule; increases in salary and change in title; post-training performance requirements; SES access to all company job orders for a stated period of time; etc.

Review by ETS Program Director

When a draft of the report is prepared, the Program Director should review the document for accuracy and effectiveness of presentation. Those aspects of the report that are unclear should be discussed and modified. An effort should be made to avoid pejorative statements, and to offer negative data in a constructive manner.

After the report has been accepted by ETS program management it should be reproduced in sufficient quantity and bound into a professional-looking presentation. It is suggested that the program have a standard window-type report cover available for this purpose.

Presentation of Report to Employers

The forwarding of the document to company management markes the beginning of a negotiation process that will culminate in the service package created to ameliorate the identified problems. This process is particularly sensitive and the approach to company management officials should be low-keyed and non-sales oriented. The steps in this process include:

- -- Delivery of Report: After calling the employer to inform him of the availability of the report, it is best to have the research team leader hand-deliver the document to the appropriate management official. At this time, if the situation permits, a preliminary discussion of the findings and recommendations should take place. Whether or not this discussion is held, an appointment should be made to discuss the substance of the report once management has reviewed its content.
- -- Follow-up Discussion: After management has reviewed the report a discussion should be held to reach an agreement on a service package. At this point it is advisable to include the ETS Program Director, Operations Supervisor or other staff member empowered to commit the agency to a service program if one is indicated. A final delineation of mutual responsibilities and a tentative schedule for services should then be worked out.
- -- Agreement: If management or the program staff feel it is required, a written agreement, generally in the form of a letter, can be prepared outlining the mutual responsibilities of the program and the client company. (An example, of this type of letter is shown in Figure 12, P. 75.

EXHIBIT A

Problem Identification - Interview Outlines

This exhibit contains guides for use in identifying in-plant problems in four classifications. Under each topic are questions directed to managers, supervisors and workers. These listings are by no means all inclusive but are offered as a starting point for developing a complete file of questions to be used in designing interview instruments.

I. General Questions to be Asked Each Interviewee:

- How long have you worked for this organization?
- What department do you work in?
- What is your job called?
- What are your job duties?
- How long have you been working at the job you have now?
- Where did you work previously?

II. Skill/Knowledge

1. Questions for Managers:

- Does the company have a training director?
- Does the company have a formal, written training plan?
- Who is responsible for skills training?
- How are training curricula and materials developed?
- How are the results of training evaluated?
- Is an orientation training program offered?
- What are the present critical skill needs in the organization?
- What skill needs can be anticipated?
- Can a group of workers be identified who are inadequately prepared for their jobs?
- Does the company have a tuition refund plan? Who is eligible?

2. Questions for Supervisors:

- Did the company provide any special training to help you assume your supervisory role?
- Are there any technical or supervisory aspects of your job that you feel unsure of?

- -- Is there another job in the company, either supervisory or non-supervisory, that you would like to have?
- -- Are there any training courses presently being offered in community institutions that you would like to take?
- -- What kind of training do you feel would benefit you?
- -- Are you responsible for the training of your subordinates?
- -- Do you have sufficient time to train your subordinates?

3. Questions for Workers:

- -- How did you learn to do the job you are now doing?
- -- Do you feel the training you received was adequate?
- -- Are there any parts of your present job that you are not sure how to do?
- -- Have you been promoted since you've been working for this company?
- -- Is there another job in this organization you feel you could do right now with little or no training?
- -- Is there another job in this organization you feel you would like to be trained for?
- -- What type of training do you feel would benefit you?
- -- As far as you know, does this company have any training program you might be able to take part in?

III. Attitude

1. Questions for Managers:

- -- Does the company promote the concept of worker participation in the goals and accomplishments of the organization?
- -- Does the company hold periodic meetings to listen to workers' opinions?
- -- Does the company give all workers equal opportunity to be prepared for and promoted to better jobs?
- -- Does the company make an effort to identify and ameliorate problems caused by racial or ethnic tensions?
- -- What do you think are the three most important things that keep your employees satisfied?

-- Do you feel the union is genuinely looking out for your workers interests or just trying to "take over"?

-- How do you think your workers feel about their supervisors? About company managers?

-- What is the most frequent reason given by workers when they quit their jobs?

-- Do you feel your younger workers are the equal of more senior employees?

-- Do you feel the fringe benefits provided by your company are adequate?

-- What do you feel can be done to improve worker attitudes toward this company?

-- Do you think your supervisors know their job?

2. Questions for Supervisors:

-- Do you enjoy your supervisory responsibilities?

-- If you had a job offer comparable to your present position at another company would you accept it?

-- Do you feel management listens to your suggestions?

-- Do you feel you treat all workers in your department equally?

-- Are your younger workers as productive as the more senior ones?

-- Do you feel your workers know their jobs?

-- Is the work of your subordinates meeting your expectations?

-- Do you feel you should get involved with your subordinates' personal problems?

-- Do you make your workers feel that their jobs are important?

-- Do you have time to adequately supervise your subordinates?

3. Questions for Workers:

-- Do you enjoy working for this company?

-- How important do you feel your job is?

-- If you had a job offer at another company for the same pay would you accept it?

-- Do you feel your supervisor or the company managers listen to your suggestions?

-- Do you feel you have an opportunity to be promoted?

-- Do you feel your supervisor treats you well?

-- Do you feel your supervisor treats other workers better?

-- Do you feel that race, sex, age, ethnic origin, etc., make a difference in this organization?

-- Do you feel the fringe benefits offered by the company are adequate?

-- What do you feel are the most serious problems in this organization?

-- Do you think your supervisor knows his job?

IV. Environment

1. Questions for Managers:

-- Does the company have a safety and accident prevention program?

-- Does the company have a safety engineer?

-- Does the company keep a record of all accidents?

-- Do you receive periodic reports on accidents and their causes?

-- Does the company have adequate eating facilities?

-- Does the company have adequate restroom and locker facilities?

-- Are all departments kept clean and tidy?

-- Is lighting adequate in all sections of the plant?

-- Is ventilation adequate in all sections of the plant?

-- Are noise levels tolerable in all sections of the plant?

2. Questions for Supervisors:

-- Are you aware of the company safety and accident prevention program?

-- Have you recently been injured on the job?

-- Have any of your subordinates recently been injured on the job?

-- Is there a type of accident that reoccurs in your section?

-- Do you feel your department is a safe and healthy place to work?

-- Is your department kept clean and tidy?

-- Is your department well lighted?

-- Is your department well ventilated?

-- Is the noise level in your department tolerable?

-- Do you feel you need help in keeping your department clean and safe?

3. Questions for Workers:

-- Are you aware of a company safety and accident prevention program?

-- Have you been injured on the job recently?

-- Do you report all accidents to your supervisor?

-- Do you feel this is a safe and healthy place to work?

-- Have you recently reported an unsafe or unhealthy condition? Was it corrected?

-- Do you have adequate eating facilities?

-- Do you have adequate restroom and locker facilities?

-- Is your work area kept clean and tidy?

-- Who is supposed to keep your work area clean and tidy?

-- Is your work area well lighted?

-- Is your work area well ventilated?

-- Is the noise level in your work area tolerable?

V. Structure

1. Questions for Managers:

-- What is your principal source for unskilled labor? For skilled labor?

-- Do you feel the hiring requirements are realistic?

-- Do you offer openings to present workers before hiring from the outside?

-- Does your organization have job descriptions for all jobs?

-- Does your organization have a standardized salary classification plan?

-- Do you feel the work rules and procedures are up to date?

-- Does the organization have a grievance procedure?

-- Does the organization have a preventative maintenance plan?

- -- Do you feel everyone in the organization knows what his job is and who his supervisor is?
- -- Do you feel the pay rates for jobs in this company are comparable to similar jobs in the community?
- -- Is the plant well laid out?
- -- Are the tool cribs and supply rooms consistantly well stocked?
- -- Can all workers easily draw the required raw materials?

2. Questions for Supervisors:

- -- Do you understand your job duties and what is expected of you?
- -- Do you see as a major responsibility the career development of your subordinates?
- -- What is the company policy on promotion from within?
- -- Do you have the right to hire, fire and/or promote?
- -- Do you get adequate support from the maintenance department?
- -- Is your section well laid out?
- -- Can your subordinates draw tools and supplies with relative ease?
- -- Is too much of your time taken up with paperwork?
- -- Could you use more help in supervising your subordinates?
- -- Do all your workers know what is expected of them?
- -- Do you feel your subordinates are adequately paid for their work?
- -- Do you feel that too much is expected from you and your subordinates?
- -- What are the most serious process problems in the company?

3. Questions for Workers:

- -- Do you understand your job duties and what is expected of you?
- -- Do you know who your supervisor is?
- -- Do you think the company promotes from within?
- -- Do you think you are being paid adequately for the job you are doing?

-- Do you think your job is boring?

-- Do you think the company is expecting too much work from you?

-- What aspects of your job do you like most? Dislike most?

-- Is your work area well laid out?

-- Can you easily draw the tools and materials you need to do your job?

-- What are the most serious process problems in the company?

TECHNICAL ASSISTANCE

Purpose: To provide or arrange for technical service that would serve to ameliorate in-plant problems either through the resources of the SES or in concert with cooperating community agencies.

Overview

The preceding unit of this section describes an analytical process designed to identify four classes of in-plant problems and to suggest approaches for eliminating their causes. These suggestions may require nothing more than unilateral action on the part of the employer, in which case the Employer Technical Services program should merely follow up periodically to determine whether or not the recommendations have been implemented. On the other hand, some of the recommendations may involve the application of training, job analysis, and problem-solving techniques which lie beyond the capabilities and/or resources of the client company. When this is the case, the ETS Program Director must make decisions similar to those made during the outreach process: Whether the required service is an appropriate activity for an SES program; whether it is within the capabilities of the program staff; and finally whether another organization in the community is better equipped to handle this particular job. If it is found that the service is not appropriate, or is beyond the capability of the program, the employer should be so informed. If another agency can be located whose service capability is more appropriate to the task, the Program Director should endeavor to link the company's need to that agency's capability. However, if the company service needs meet the tests of appropriateness and feasibility, and Program Director should make arrangements for the provision of service.

The techniques employed by this program are neither new nor innovative. Approaches to occupational analysis, training program design, curriculum development, and various types of training have long been employed by a number of service agencies in the manpower field. As a result, numerous technical manuals are available on the use of these techniques, and there is little need for yet another version in this manual. However, for review purposes, this document does include technical appendices containing brief outlines of the more important techniques, supported by selected references. (See Appendix I on Job Analysis and Appendix II on Training.)

What is innovative in an ETS program is the manner in which these techniques are adapted to meet the particular manpower problems of employers and how they are applied in varying contexts. The analytical approach outlined in the previous unit will result in the identification of significant company manpower problems organized in four classifications: Skill/Knowledge, Attitude, Environment, and Structure. The selection of the appropriate techniques to help solve problems in each of these areas will depend on the styles, traditions, and resources of a particular company. The format, then, of this technical assistance section consists of general statements on the nature of the problem areas and some of the most commonly identified causes, followed by a series of abstracts delineating specific company problems and the technical response suggested and implemented by the two operational Employer Technical Services programs--SIS in Columbus and ITS in Newark.

Skill/Knowledge

> *Many production problems in a plant result from inadequate training systems and poor educational opportunities for the production workforce. Skill Shortages, poor productivity, slow or non-existent internal upward mobility and a heavy reliance on the external labor market for skilled workers may be evidence of skill/knowledge problems.*

Training procedures, particularly in smaller organizations, are too often poorly planned and ineffectively executed. Management, even when persuaded of the need for improved or additional training efforts, usually finds more pressing demands for the firm's financial and staff resources. Adequate training procedures require skilled trainers and extensive preparation which may lie beyond the capabilities of many firms, particularly the smaller ones which simply do not have the money required to support the loss of productive time for trainees or to purchase training materials. In most cases, marginally profitable enterprises do not even have the necessary resources to develop applications for governmental manpower assistance. And larger companies with well-established training departments are often resistant to change and reluctant to make significant modifications until convinced that the need is more than transitory.

Although most companies' policies favor promotion from within, the lack of adequate training procedures can result in persistent skill shortages, an inability to move less skilled workers up to higher rated positions and can create an unhealthy reliance on the external labor market. Skill shortages can be a recurring and bothersome problem for a manager, and a poorly trained workforce may cause serious production problems adversely affecting the competitive position of the company. Excessive scrap, unacceptable rejection rates and customer complaints, frequent machine breakdowns, high accident rates and failures to follow company standard operating procedures can often be attributed to workers not adequately prepared for their jobs.

Probable Causes and Responses

Structuring a company's training function can be the first step in an orderly solution to skill/knowledge problems.

In many large companies the central training department is solely concerned with management development, while skill training is left, with relatively little supervision, to the production department foremen. In smaller companies, with no company-wide training program, the entire training responsibility is given to the first line supervisor. In both situations, the supervisor has generally not received any preparation for the training role and relies heavily on informal OJT as the primary training technique. Even if the supervisor has the requisite training skills, he is generally so overburdened with paperwork, production crises and personnel management problems that there is little time available for the development, provision and monitoring of training programs.

To solve skill/knowledge problems, a precise definition of the nature and cause of the difficulty must be made. The general response to problems of this type is the development of new training procedures and/or a modification of occupational content, job requirements and internal and external recruitment procedures based on job task analysis.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Imprinting Equipment
Type of Organization: Manufacturing
SIC Code: 3999 Size of Workforce: 150
Unionized: Yes ☒ No ☐

Project Background:

At the suggestion of a personnel director whose company had benefitted from an upgrading and supervisory training program, ITS contacted this manufacturer of coding and imprinting equipment. The company had substantially expanded over the past five years and was dealing with many of the problems which attend the growth of a small, family-owned company to a medium sized corporation. A more formal organizational structure was required to maintain efficiency, but company officials did not want the organization to become too impersonal. During this growth period many highly skilled production workers were promoted to supervisor, creating serious skill shortages. Company management was interested in building a more efficient manpower management system and welcomed the assistance of ITS.

Problems Identified and Recommendations:

ITS interviewed all management and supervisory personnel as well as a sampling of the production workforce. It was found that managers and supervisors were unsure of their responsibilities and insensitive to the feelings of the workers. Many unskilled workers felt there was little opportunity for future advancement at the company. In addition, the company was finding it extremely difficult to find skilled machine shop workers.

Technical Service Response:

ITS decided on a long term commitment to the company which would create a more cohesive and productive workforce. They conducted the following training:

1. A 12-hour management development training course including communications, team building and interpersonal relations.
2. A 16-hour supervisory training course including elements of supervision, planning, communications, etc.
3. A 70-hour machine tool operators course for unskilled assemblers which was offered in cooperation with the local MDTA Skills Center.

Outcomes:

1. Eight graduates of the machine tool operators course were given a new job title and a 10 percent salary increase.
2. Management officials report increased productivity.
3. The company began placing all orders with local office of the SES.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Retail Merchandise
Type of Organization: Discount Department Store Chain
SIC Code: 5311 Size of Workforce: 150
Unionized: Yes ☒ No ☐

Project Background:

The company was referred to SIS by a Cleveland manpower program which had originally contacted the firm. The company, a large discount retailer with numerous outlets throughout the midwest, has experienced a rapid expansion over the past few years and was having difficulty hiring, training and retaining qualified personnel. In addition, company management was concerned about poor inventory controls and a serious stock shrinkage problem throughout the chain. They therefore welcomed the opportunity to have an expert outside organization review the company's training procedures and provide assistance in training program design and curriculum development.

Problems Identified and Recommendations:

SIS met with company management and learned that the new inventory control system was not working properly because the employees had not been adequately trained in its use. The organization had no formalized training procedures. SIS recommended that a training program be developed and conducted on all phases of store operations for present department heads and candidates for that position. The curriculum developed for this training could then be slightly modified by the company and used to train other employers.

Technical Service Response:

SIS conducted a 40-hour training program for 13 department heads in merchandising, ordering, shrinkage, and store procedures. As part of the course SIS developed and packaged an 8-hour slide-tape presentation and programmed guide on the use of the inventory control system.

Outcomes:

1. The company is presently using the slide presentation and handbook in all the retail outlets and has shown the package at several industry conferences.
2. The company upgraded several of the graduates and plans to promote the entire group as openings occur.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Health Services
Type of Organization: Women's Hospital
SIC Code: 8069 Size of Workforce: 400
Unionized: Yes ☒ No ☐

Project Background:

The hospital was approached through direct market techniques based on a comment from an employee of another hospital that the hospital was in the process of expanding and had a history of difficulty in recruiting qualified help. The hospital has seldom used the ES in the past; most employees were recruited through walk-ins and employee referrals but the personnel director was receptive to job development contacts for qualified applicants. The initial contact was with hospital administrator who identified the dietary department as an area troubled by turnover and a need to increase productivity when a new building wing containing 90 beds was opened. A problem analysis was performed to identify specific problems.

Problems Identified and Recommendations:

SIS conducted a problem analysis and recommended a three track training program in response to their assessment that there was:

1. A lack of coordination and communication between the supervisors and the kitchen staff;
2. A need to improve the efficiency of the staff to handle increased workloads resulting from the hospital's expansion;
3. A need to orient the staff to the new processes and equipment in the kitchen. Because the hospital had a limited training capability, SIS offered to develop the curriculum and training materials, run one cycle of the training and train a company trainer.

Technical Service Response:

SIS provided the following training using company facilities and on company time:

1. Food Service Operations: 28 hours of instruction in food handling, safety and sanitation for the entire kitchen staff of 21 persons.
2. Elements of Supervision: 12 hours of leadership techniques and communications exercises for four newly appointed lead workers.
3. Elements of Supervision: consisting of the supervisory course plus an additional 4 hours in planning and scheduling techniques and human relations for dietary department supervisors and other selected hospital department heads.

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Type of Organization: Women's Hospital

Outcomes:

1. The 38 employees who completed training received 5 percent salary increases.
2. The hospital began placing its job orders with the local office of the ES.
3. Management reported an apparent improvement in cooperation and efficiency resulting in increased productivity.
4. The supervisor of the nursing department requested human relations training for 30 nurse aides.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Packaging Machinery
Type of Organization: Manufacturing
SIC Code: 3551-3569 Size of Workforce: 150
Unionized: Yes ☒ No ☐

Project Background:

The company, a small manufacturer of packaging equipment was referred by the state Economic Development Agency. The company had contacted the development group because it had been having persistant problems in recruiting skilled mechanics and assemblers. An EDA representative contacted an official of the local office of the State Employment Service and was told that there is a continuing shortage of skilled operatives in those two occupational groupings. However the SES official referred the EDA representative to ITS, suggesting that in-plant training might ameliorate the skill shortage problems.

Problems Identified and Recommendations:

ITS reviewed the promotional progressions and training procedures in the plant and discovered that certain groups of low skilled assemblers were blocked from promotion because of inadequate training procedures and rigid senority structures. ITS recommended a training program in machine tool set-up and operations for assemblers in the lowest pay classifications. Because many of the men in these classifications were low-senority workers, ITS suggested that the union be asked to waive the senority provisions of the collective bargaining agreement for this program. Finally, ITS recommended a brief course in interpersonal relations for all trainees and their supervisors.

Technical Service Response:

1. ITS, in cooperation with the local MDTA Skills Center, conducted a 60-hour program in set-up and operations of the drill press, engine lathe, milling machine and surface grinder.
2. ITS conducted a 16-hour course in interpersonal relations including perceptions, communications and goal setting and responsibilities.

Outcomes:

1. All graduates of the program received immediate salary increases and will be promoted to a higher job classification when openings occur.
2. The company officials were pleased with the program and said they felt the training had substantially reduced their manpower problems.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Alcoholic Beverages
Type of Organization: Government Owned Retail Sales
SIC Code: 5921 Size of Workforce: 2000
Unionized: Yes ☒ No ☐

Project Background:

The organization was referred to SIS by a manpower service program in Cleveland which was unable to help the client. The Cleveland program had initiated negotiations and accomplished a problem analysis before their withdrawal from the situation. At the suggestion of the Cleveland program's director, SIS contacted the organization to determine whether it could be of any assistance. It was learned that the organization was in the process of planning a substantial state-wide training effort in order to improve the effeciency of the retail operation and to insure conformity with the organization's stock control system.

Problems Identified and Recommendations:

SIS recommended three separate training tracks to solve the following problems:

1. A lack of uniformity in carrying out store operating procedures.
2. A lack of knowledge among the staff of accounting and inventory procedures.
3. A lack of communication among workers and managers in the 350 stores throughout the state.

Technical Service Response:

Because the trainees were dispersed throughout the Columbus area, SIS used its centrally located facilities to provide the following training:

1. Twenty hours in store operations for 15 clerks.
2. Twenty-four hours in store operations for 15 clerks who were to be upgraded to assistant managers.
3. Twenty-four hours in store operations and principles of supervision for 32 store managers and 9 district supervisors.

Outcomes:

1. The organization will upgrade 15 graduates to assistant store manager positions as openings occur.
2. The organization asked that SIS train a group of trainers to carry out this training on a continuing basis.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Refrigeration Equipment Repair
Type of Organization: Industry Association
SIC Code: 7623 Size of Workforce: 250
Unionized: Yes ☐ No ☒

Project Background:

A member firm of the client association was contacted through the direct marketing program. During the preliminary discussions with that company's president, it was learned that the refrigeration equipment service industry in the Columbus area had been unable to recruit adequately trained servicemen. Although the company was willing to train new employees, the informal training program required approximately four years to produce a competent repairman. The industry had tried to work out a training program with the Columbus MDTA Skills Center but had been dissatisfied with the results.

Problems Identified and Recommendations:

SIS conducted a Training Needs Survey at one of the association's member firms and determined that the 4-year period presently needed to completely train repairmen could be substantially reduced by an intensive training program. However, since no single firm in the association had enough prospective trainees to justify an individual program, SIS contacted the other member firms to see if they would be interested in sending trainees to an industry-wide consortium program. The training proposed by SIS would include not only equipment repair, but sales and communications skills as requested by the management of several of the firms.

Technical Service Response:

SIS designed the training program curriculum and secured a commercial package of training materials including slides, records and handbooks to be used in the program. SIS then worked with the Association and with equipment manufacturers to identify and secure qualified skill trainers for each unit of the program. The 36-hour training program was conducted in SIS facilities for 20 trainees, some of whom were newly hired employees and others who were relatively long term workers.

Outcomes:

1. Several firms in the association placed orders with OBES for trainees who would be appropriate for the training program.
2. Upon successful completion of the training program the 20 trainees will be given raises of up to 30 percent.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Pneumatic Tube Communications Systems
Type of Organization: Manufacturing
SIC Code: 3542 Size of Workforce: 350
Unionized: Yes ☒ No ☐

Project Background:

An ES employer representative suggested that ITS contact the firm since it was having serious difficulty recruiting skilled sheet metal workers. The company had tried a variety of sources, including the local job bank, but responses from this approach and from frequent newspaper advertisements were inadequate. ITS arranged a meeting with company officials and invited a metal working instructor from the local MDTA Skills Center to attend.

Problems Identified and Recommendations:

ITS determined that a training program could eliminate many of the company's skill shortages. A plant tour and meetings with the Operations Manager, Plant Superintendent and Manager of Manufacturing and Engineering gave the ITS training team the necessary information on requirements and expectations for training in sheet metal occupations. A substantial portion of the research activity was devoted to the identification of training materials and training personnel. Based on the research, ITS recommended an intensive training program in sheet metal skills for 10 carefully selected workers.

Technical Service Response:

ITS, in cooperation with the MDTA Skills Center, is conducting a 25-week, 100-hour course in the elements of sheet metal fabrication for 10 workers.

Outcomes:

1. All graduates of the course will be promoted to sheet metal mechanic upon completion of the training. This promotion entitles the workers to journeymen pay.
2. The company has bought 13 sets of the commercially available training material in order to build a permanent training capability.
3. The initial assessment of the training by company officials is very encouraging.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Retail Merchandise
Type of Organization: Department Store
SIC Code: 5311 Size of Workforce: 1200
Unionized: Yes ☐ No ☒

Project Background:

The company, a large quality department store, contacted SIS at the suggestion of a former employee who had participated in an SIS operated program at her new firm. The department store personnel officials had begun to examine the store's recruiting and personnel procedures in order to develop an affirmative action program. The store used walk-ins as the major recruitment source, but was unhappy with the quality of applicants. The company was having particular difficulty recruiting minority group applicants who met the store's hiring standards. Since the personnel officials were considering both new recruitment procedures and the possibility of developing an entry level orientation program, they were very receptive to the SIS program.

Problems Identified and Recommendations:

SIS concurred with the company on the need for a special orientation program in sales techniques for entry level workers and offered to help the company develop the program. It was felt that if workers were better prepared for the entry level jobs, the retention rates would be higher.

Technical Service Response:

SIS reviewed an 8-hour programmed learning course which the company had developed for orientation training and suggested revisions. In addition, SIS prepared additional curricula for the orientation program on sales techniques, simple math, grooming, communications and human relations.

SIS conducted one cycle of the 20-hour orientation training for 11 entry workers (8 of whom were minority group members hired as part of an affirmative action program) and a company trainer.

Outcomes:

1. The entry level training program has been repeated by the company trainer and has now become part of the standard operating procedures for the orientation of new employees.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Cooking Oils
Type of Organization: Manufacturing
SIC Code: 2096 Size of Workforce: 110
Unionized: Yes ☒ No ☐

Project Background:

The company, a medium-sized manufacturer of cooking oils, was contacted during the direct marketing campaign. The firm had recently been acquired by a large food products corporation and had both a new president and a new personnel director. The new president and his management staff were interested in improving the productivity throughout the organization. They were particularly interested in improving the maintenance program since the equipment was old and subject to frequent breakdowns and capital expenditures could not be made immediately. The personnel director had already made some preliminary assessments of the problems and had initiated a safety training program. He was also looking at commercially available supervisory training programs.

Problems Identified and Recommendations:

SIS conducted a problem analysis in the maintenance department and a skill inventory of the maintenance staff. They found that the staff had a number of skill deficiencies and recommended that a program be conducted to cross-train all maintenance men in welding, pipe fitting, light electrical repair, blueprint reading and shop math.

In addition, SIS offered to conduct supervisory training throughout the plant and develop an orientation program for all employees to familiarize them with the total operation of the plant.

Technical Service Response:

1. SIS conducted a 16-hour course for 23 supervisors in elements of supervision.
2. SIS developed a slide presentation on all company operations for use in orientation and in explaining job opportunities to present or prospective employees.

Outcomes:

1. Although 23 supervisors were trained, none received any promotions or salary increases as a result of the training.
2. The company and SIS could not come to an agreement on a cross-training program for the maintenance department. However, the supervisory training appears to have had a positive effect on company operations.
3. The company, which had stopped using the Employment Service several years ago, has begun to place a substantial number of orders with the Columbus local office.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Social Services

Type of Organization: Private Non-Profit Community Agency

SIC Code: 8399 Size of Workforce: 250

Unionized: Yes ☐ No ☒

Project Background:

The agency was referred to ITS by a job developer who had contacted it in the course of his field work. The facilities of the organization were antiquated and a substantial amount of repair work was required. Unfortunatly, the present maintenance staff was unable to effect the repairs and the agency did not have the funds to secure the services of outside contractors to do the work.

Problems Identified and Recommendations:

ITS reviewed the type of repair work to be done and identified the skills required. Then, the maintenance personnel were interviewed to determine their interest in training. It was found that all of the maintenance staff was interested in acquiring new skills but that many of these workers had a poor self image and might benefit from a personal development program. ITS suggested that a skill training program be provided for the maintenance staff.

Technical Service Response:

1. In cooperation with the local MDTA Skills Center, ITS conducted a program in elementary plumbing, electrical work and carpentry. In addition instruction was provided in the proper operation of floor maintenance equipment and wet vacuums.
2. ITS conducted a program in job responsibilities, personal communications and work attitude for the trainees.

Outcomes:

1. All graduates received an 8% salary increase at the end of the training.
2. The maintenance staff demonstrated their new skills by redecorating the lobby of the building including painting, installing new baseboards and repairing old light fixtures. In addition, with the assistance of ITS, the agency borrowed a steam cleaning machine and the maintenance staff cleaned the building's exterior.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Aluminum Trim
Type of Organization: Manufacturing
SIC Code: 3354 Size of Workforce: 115
Unionized: Yes ☒ No ☐

Project Background:

The company was contacted through the direct marketing program because it is black owned, has a largely black workforce, and pays comparatively low wages. In addition, SIS learned that the company was acquiring new equipment and might be in the process of expanding. However, there was little indication that the company was experiencing serious personnel or productivity problems. Company management was interested in the services offered by the program, but could only articulate vague concerns about a lack of motivation among the workers.

Problems Identified and Recommendations:

SIS conducted an extensive problem analysis by interviewing almost the entire workforce of the company. It was found that both supervisory and production workers were old (the average length of service with the firm was 22 years), and that the firm had no formal training program to prepare any new workers who joined the company. SIS, therefore, recommended:

1. The appointment of departmental trainers, who were not currently supervisors, to assume responsibility for training new workers and to eventually assume supervisory roles as positions became available.
2. That a train-the-trainer course be provided by SIS for these new trainers.

Technical Service Response:

None

Outcomes:

1. Although the company indicated some interest in the idea of departmental training, few employees expressed any interest in applying for the trainer position.
2. When the new equipment was delayed and the lack of interest by workers in applying for the trainer position became apparent, the company rejected the idea of a train-the-trainer program. However, they now plan to send one or two of their supervisors to a consortium train-the-trainer program to be conducted by SIS for various companies in the Columbus area.
3. The company agreed to have SIS provide motivational training for the supervisory staff help alleviate apparent attitude problems.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Wire and Cable
Type of Organization: Manufacturing
SIC Code: 3357 Size of Workforce: 150
Unionized: Yes ☒ No ☐

Project Background:

The company, a manufacturer of wire and cable products, contacted ITS at the suggestion of a newly hired supervisor who had participated in an ITS conducted training program at his former place of employment. The company had recently undergone a reorganization, and many of the supervisors had little experience in non-production jobs. In addition, the company's business was expanding and management was concerned about how to increase productivity to meet new customer demands.

Problems Identified and Recommendations:

ITS interviewed all the supervisors to determine what types of training might be needed. It was suggested that a basic supervisory practices course be offered for all supervisory personnel. In addition, ITS suggested that the company secure the services of an industrial engineer to assist management in enlarging the production facilities.

Technical Service Response:

1. ITS conducted a 12-hour course in supervisory skills for all supervisory personnel.

2. ITS arranged for the company to secure the free services of an industrial engineer through the New Jersey State Technical and Business Advisory Service, a program of the State Division of Economic Development.

Outcomes:

1. Several graduates of the supervisory program were promoted to higher paying, more responsible management positions.

2. The company reported that those who participated in the program exhibited a stronger identification with the company and were more productive workers.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Skill/Knowledge

Company Identification:

Principal Product or Service: Health Services

Type of Organization: Geriatric Hospital

SIC Code: 8069 Size of Workforce: 325

Unionized: Yes ☒ No ☐

Project Background:

Because SIS had operated a successful program in a hospital, the SIS marketing group decided to survey all medical service organizations in the Columbus area. The client organization is a state supported geriatric hospital. The hospital administrator had been concerned about productivity and quality of service but was unable to initiate any significant action because of budget constraints. He was immediately receptive to the SIS service program and, after checking with another hospital in which SIS had done some work, suggested that training be provided for the dietary department. In addition, it was agreed that the supervisors in all departments would be surveyed to determine if other training needs existed.

Problems Identified and Recommendations:

SIS conducted a problem analysis in the dietary department, and also interviewed the heads of other departments. They found the following problems and recommended training as the solution for each:

1. The dietary department had no dietician and was understaffed. Since no additional staff could be hired, SIS suggested that training might increase productivity.
2. The administrator frequently had to countermand the instructions of the supervisors who had not been adequately prepared to fulfill their responsibilities.
3. The nursing supervisor pointed out that many LPN's were unable to pass an entrance examination to qualify for a pharmacology course. Passing the pharmacology course would entitle the nurses to be certified at a higher grade level and receive an increase in salary.

Technical Service Response:

SIS conducted the following training on company time in company facilities:

1. Food Service Operations, a 16-hour course for 15 dietary department workers;
2. Elements of Supervision, a 16-hour course for 13 supervisors;
3. Remedial Math, a 20-hour course for 11 LPN's.

Outcomes:

1. Five of 11 LPN's who took the math course passed the entrance examination -- a much higher success ratio than in the past.
2. The hospital has begun placing job orders with the ES.
3. No salary increases resulted from the food service or supervisory training, but management has reported improved productivity.

Attitude

The growing alienation of the American worker from his work, the breakdown of organizational loyalties, and the continued polarization of groups (black/white, old/young, men/women) is having a counter-productive effect on many firms. Sabotage, absenteeism, grievances and personal conflicts among co-workers, supervisors and managers may result from attitudinal difficulties.

During the past few years increasing attention has been paid to the totality of the workplace as a result of such clear indications of worker discontent as absenteeism, turnover, behavioral difficulties and ever increasing inflationary wage demands. Also, younger, better educated workers are spurning job and institutional loyalties of previous generations. Some observers feel that worker alienation is no more serious now than it ever was. Others perceive an increase in worker dissatisfaction and have suggested that when these problems become severe, industry's response will be to avoid them and move toward even greater automation.

Within a particular plant, attitude problems may be exhibited in the form of disruptive behavior such as: large numbers of grievances over seemingly minor issues; stiff resistance to even minor changes in work rules and procedures; persistent wildcat work stoppages; frequent personal arguments and fights between and within levels of the organization; refusal to accept overtime; and overt racist and sexist actions by workers and supervisors.

Probable Causes and Responses

Unlike those in other problem areas, the causes of attitude problems are difficult to pinpoint. When the morale of a workforce has been adversely affected by environmental or structural problems, improvements in those areas will usually have a salutary effect on worker attitudes. However, the personal outlooks and individual prejudices of workers, managers and supervisors can often result in patterns of poor interpersonal relationships leading to an unhealthy atmosphere of worker discontent.

A major cause of these difficulties might be management's view of the workforce as merely the means of production and not as human beings with needs that transcend mere economic reward. This attitude on the part of management inhibits free communication throughout the organization and restricts the feeling of participation on the part of the workforce. Other bothersome issues can also adversely affect worker attitude: upcoming union elections; sharp distinctions between working conditions for production workers and management; perceptions by workers that some individuals or groups are being given favored treatment; and the inability of individuals to control personal racial and sexual prejudices.

It must be recognized that less progressive managers facing behavioral problems in the workforce usually respond by manipulating a wide range of factors -- generally involving tighter controls or technological changes -- before attempting to deal with the basic causes of dissatisfaction. However, it has been demonstrated that human relations training, the improvement of working conditions and modifications of work rules and compensation plans can all have positive effects on worker morale.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Snack Food Products
Type of Organization: Food Processing and Sales
SIC Code: 2099 Size of Workforce: 60
Unionized: Yes ☐ No ☐

Project Background:

The company, a small manufacturer of snack food products, was contacted by SIS through the direct marketing program. The company managers were particularly concerned about the driver-salesman group which delivered the products to stores throughout the Columbus area. These men were expected not only to deliver, but to sell, and although the drivers were paid on a commission basis, they were not meeting the expectations of management. The corporate officials were not really sure of the reason for this situation and therefore welcomed the assistance of an outside organization.

Problems Identified and Recommendations:

SIS conducted a problem analysis by interviewing the driver-salesmen and observing them as they worked their various routes. SIS found that the men were poorly motivated and had a serious morale problem because they felt:

1. That since they had no fringe benefits the company did not care about them.
2. That the incentive pay received for establishing new accounts or increasing existing ones did not warrant the extra effort involved.
3. That no one explained the sales responsibility to them or trained them in sales techniques.

SIS recommended that the following steps be taken to improve the situation:

1. A fringe benefit package, including a hospitalization plan, be instituted;
2. Training be provided in sales techniques;
3. The incentive system be adjusted to better motivate the men to sell.

Technical Service Response:

SIS offered to conduct a 20-hour training program for the 20 driver-salesmen. The program has been scheduled for the near future.

Outcomes:

1. Base salaries for all driver-salesmen were increased eight percent.
2. A progression structure for the driver-salesmen was implemented Four salary grades were created, the top grade being a supervisory position.
3. Three drivers were immediately promoted to the supervisory position.
4. The company implemented a fringe benefit package which included a hospitalization plan for all workers.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Garden Tools
Type of Organization: Manufacturing
SIC Code: 3423
Size of Workforce: 300
Unionized: Yes ☒ No ☐

Project Background:

The company was contacted through the direct markeing program. The plant supervisor, who had recently come to the company was concerned about the high turnover, (almost 400 percent per year) excessive scrap and large amounts of overtime which the company was experiencing. The plant manager and employee relations director had formed some preliminary judgments concerning the causes of these problems and welcomed the opportunity for confirmation by an outside organization.

Problems Identified and Recommendations:

Through a problem analysis, SIS found that the workers in the firm were poorly motivated and had poor attitudes concerning the company as evidenced by excessive scrap, extensive lateness, and high turnover. SIS found that many of these attitude problems resulted from a feeling on the part of the workers that management was not concerned with them as human beings. Wages were not competitive, incentive rates were unrealistic, supervisors only commented on work poorly done, and there was a general lack of communication between management and the workforce. SIS recommended that the company implement the following recommendations over a one-year period in order to give the workers a feeling that the company was interested in them:

1. Establish a system for recognizing workers' special accomplishments;
2. Improve the company newsletter;
3. Clarify and improve the wage/incentive system;
4. Establish a departmental bonus system to encourage teamwork;
5. Provide orientation on company policies and processes for new workers;
6. Correct unacceptable environmental conditions;
7. Conduct exit interviews with workers who quit their jobs to determine their reasons for leaving.

Service Response:

SIS provided assistance to the firm by:

1. Designing an exit interview procedure;
2. Inviting the firm's supervisors to attend a consortium training program to be conducted by SIS.

Outcomes:

1. The company enhanced in-plant communications by improving the newsletter, installing a suggestion box and promptly responding to employee complaints.

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Type of Organization: Manufacturing

2. The general foreman was asked to wear a suit to work (it was felt this would discourage him from taking on non-supervisory tasks).
3. The company instituted the exit interview procedure designed by SIS.
4. The company plans to implement all SIS recommendations during a one-year period in order to get maximum improvement in morale and productivity.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Hand Tools
Type of Organization: Manufacturing
SIC Code: 3423
Size of Workforce: 225
Unionized: Yes ☒ No ☐

Project Background:

The company, a manufacturer of forged hand tools had agreed to an entry level JOBS contract. The NAB contract representative suggested that the firm contact ITS about providing human relations training for the foremen who were slated to supervise the NAB enrollees. During preliminary discussions between ITS staff and the company officials, it was discovered that the firm suffered serious absenteeism and turnover problems and had generally poor productivity. It was agreed that in addition to the human relations program ITS would examine the company's manpower management procedures.

Problems Identified and Recommendations:

Analysis of the turnover problem indicated that most separations occurred during the first six weeks of employment among workers between the ages of 18-25. ITS suggested an orientation program to formally indoctrinate new workers to the forging jobs. It was hoped that an orientation program would have a favorable effect on the worker retention rate and the operating efficiency of the company. Comments from the workers interviewed relating to supervision, work conditions, pay scales, personnel practices and other areas, indicated a need for an in-depth study of the forging department. Further, the corporate office was concerned about the Newark plant's inability to operate at full capacity because of workforce instability and was considering closing the plant if the operating efficiency did not improve.

Technical Service Response:

Two seven-hour human relations workshops were conducted for all management and supervisory personnel, concentrating on supervision of minority group workers, communications and Hispanic and Black cultures and life styles. An orientation training program was developed and conducted for new employees in the forging department, consisting of two-hour sessions on five consecutive days. Materials were given to management to establish a permanent orientation program. A turnover study was accomplished in three steps. The drop forger job was analyzed and documented through observation and interviews to delineate the tasks, requirements, physical demands and working conditions. An interviewing schedule was developed to obtain worker characteristics and attitudes towards the company, supervisors, jobs and other areas. Characteristics and attitudes were analyzed and a worker profile was developed for a report to management, which included findings, conclusions and recommendations to reduce turnover.

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Type of Organization: Manufacturing

Outcomes:

1. Corporate executives studied the report and agreed to adopt a number of the recommendations, including:

    -- Remodeling the antiquated building
    -- Installing new lockers and showers
    -- Adding new lunchroom and lounge facilities

2. The worker profile was used in recruiting new workers and resulted in hiring more suitable applicants.

3. The orientation program was instituted to indoctrinate all new workers.

4. Turnover was drastically reduced.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Health Services
Type of Organization: Women's Hospital
SIC Code: 8069 Size of Workforce: 400
Unionized: Yes ☒ No ☐

Project Background:

The hospital was approached through direct marketing techniques based on a comment from an employee of another institution that the hospital was in the process of expanding and had a history of difficulty in recruiting qualified help. The hospital had seldom used the ES in past. Most employees were recruited through walk-ins and employee referrals, but it was receptive to job development contacts for qualified applicants. The initial contact was with the hospital administrator who identified the dietary department as an area which was troubled. Initial service was offered in the dietary department by SIS, but other department heads in the hospital were asked to observe and participate in the training. As a result of this participation, the nursing supervisor requested a similar program for her nurse aide staff.

Problems Identified and Recommendations:

The nursing supervisor felt that the technical skills of the nurse aide staff were adequate but she was dissatisfied with the quality and level of service provided by this group. The SIS staff interviewed the nursing supervisor, several department heads and all the members of the nurse aide staff. The results of this effort confirmed the opinion of the nursing supervisor. The SIS team reported that the nurse aides had a poor understanding of their job requirements, lacked ability in face-to-face interchange with patients and had little knowledge of what happened throughout the hospital, although they had adequate technical skills from previous training. Thus, SIS recommended that training in interpersonal relations be offered to the nurse aide staff.

Technical Service Response:

SIS provided the following training using company facilities and on company time:

1. Three 16-hour cycles of training in interpersonal relations with heavy emphasis on communications, perceptions and hospital operations.

Outcomes:

1. The 60 nurse aides trained received a title change from Nurse Aide I to Nurse Aide II and a five percent salary increase.
2. Workers' commitments to their jobs were strengthened and hospital management has indicated that communication with patients, and understanding of patient problems has never been better.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Plastic Nursery Furniture
Type of Organization: Manufacturing
SIC Code: 3079 Size of Workforce: 127
Unionized: Yes ☒ No ☐

Project Background:

The company, a manufacturer of nursery furniture, is a division of a large manufacturing conglomerate. SIS had approached the personnel director of another division of the parent company through the direct marketing program and was referred to the client company. The firm, located in a suburb of Columbus, had recently merged with another organization and was in the process of expansion. The president and personnel director of the organization were concerned about finding manpower sources for this expansion and wanted to decrease the high turnover rate. They therefore welcomed the assistance of an outside organization.

Problems Identified and Recommendations:

SIS conducted a problem analysis for the company and found a number of factors contributing to the high turnover and low morale among the workers Among the factors were:

1. Conjested work areas;
2. Inadequate lounge and lunchroom facilities;
3. An irrational production process calling for workers to shift from one job to another several times daily, thus preventing them from achieving the piece rate required for incentive pay;
4. Demoralizing productivity reports by worker name posted daily;
5. Supervisors not equipped to handle human relations problems.

SIS recommended that:

1. An industrial engineer be called in to examine the physical plant facilities and the organization of the work and to make appropriate changes;
2. Productivity reports be published by departments instead of by individuals to create competition and team spirit among the workers.
3. Supervisors and lead workers be trained in communications skills and human relations.

Technical Service Response:

SIS invited the company to send supervisors and lead workers to a consortium program to be conducted by SIS for Columbus area firms.

Outcomes:

1. The company will send 12 members of the supervisory staff to a supervisory workshop offered by SIS. However, no promotion or salary increases are expected as a result of this training.

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Type of Organization: Manufacturing

2. The company secured the services of an industrial engineer to study the workflow and make changes in the plant layout.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Gummed Paper and Tape
Type of Organization: Manufacturing
SIC Code: 2641 Size of Workforce: 200
Unionized: Yes ☒ No ☐

Project Background:

The company was referred to ITS by the local chapter of the National Alliance of Businessmen. NAB had contacted company management in order to interest them in a NAB entry level or upgrading program. Management was unable to participate in a JOBS contract but did voice some concern over persistent morale problems which had resulted in a lowering productivity in several departments and instances of sabotage.

Problems Identified and Recommendations:

ITS conducted a problem identification and analysis survey in the material handling department and found:

1. That the pay rates were considerably below the salary levels for comparable jobs in the community. ITS suggested that wages be increased, but only after the workers had participated in a training program.
2. That the occupational structure in the material handling department offered little opportunity for advancement. ITS suggested that at least one higher job classification be created in that department and that the graduates of the training program be given first priority in filling the new positions.
3. That poor supervisory practices and the insensitivity of supervisors to the workforce was a major cause of morale difficulties.
4. That workers did not feel they were responsible for the equipment they operated. ITS suggested each man be assigned a particular piece of equipment (i.e. fork lift) and be given responsibility for its maintenance.

Technical Service Responses:

1. ITS conducted a training program for the material handling department covering company history, safety procedures and the proper operation of fork lift equipment.
2. ITS designed a company driver's license for all graduates of the fork lift course and wrote regulations which involved forfeiture of the license if the worker violated safety rules.

Outcomes:

1. The company added a new classification to the material handling occupational structure.
2. All graduates of the program received 10 percent salary increases.
3. Three months after the end of the training program, the company reported a 40 percent decrease in equipment breakdowns and a substantial reduction in scrap.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Aluminum Trim
Type of Organization: Manufacturing
SIC Code: 3354 Size of Workforce: 115
Unionized: Yes ☒ No ☐

Project Background:

The company was contacted through the direct marketing program because it is black owned, has a largely black workforce and pays comparatively low wages. SIS's problem analysis uncovered a need for a more structured training program for the company to meet anticipated skill needs when the relatively older workforce retired. The SIS recommendations included a suggestion that departmental trainers be appointed. However, there was little interest among the workers in applying for this position, which reinforced a company management view that a serious motivational problem existed in their workforce.

Problems Identified and Recommendations:

SIS interviewed both workers and supervisors in the plant and found that the complacency and lack of motivation existed for several reasons. First, the plant supervisor seemed to bypass the departmental supervisors, thus demeaning their positions in the eyes of the production workers. Because of this, and the lack of a significant salary differential, supervisory positions were considered undesirable and were difficult to fill. Also, there was a general lack of team spirit among the workers. SIS therefore recommended:

1. That the company send the plant supervisor to a special course in human relations;
2. That a training course in supervisory skills be conducted by SIS for present supervisors and other workers with potential for promotion to supervisory positions;
3. That an orientation course on the company, its products and processes, be conducted for all employees to improve morale.

Technical Service Response:

SIS conducted a 24-hour course in Elements of Supervision for 10 supervisors. The training was provided on company time, using company facilities.

Outcomes:

1. The company did not feel a formal orientation program was necessary.
2. The training program for supervisors was implemented and appeared to have some positive effects on the supervisory workforce.
3. The company placed several job orders with the ES through the SIS program staff.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Health Services
Type of Organization: General Hospital
SIC Code: 8062
Size of Workforce: 1000
Unionized: Yes ☒ No ☐

Project Background:

This general hospital learned of the SIS training capability through a presentation at a professional association meeting by the director of a women's hospital in which SIS had worked. The general hospital, which already had an effective training department, requested a meeting with SIS to discuss training in human relations and team building for their nurse aide staff. Hospital management felt that although there was not a critical morale or attitude problem among the nurse aides, productivity and quality of service might be improved by this type of training.

Problems Identified and Recommendations:

SIS concurred with the hospital's assessment that human relations training for nurse aides would be beneficial and recommended one cycle of training in which at least one member of the hospital training staff would participate.

Technical Service Response:

1. SIS conducted one 16 hour cycle of training in human relations and communications skills for 13 nurse aides and one trainer from the hospital staff.

Outcomes:

1. Twelve of the nurse aides were upgraded to nurse technician and given a 12 percent salary increase.
2. The training department at the hospital now has the capability to provide this type of training for other departments in the Hospital.
3. The hospital placed several job orders with the ES through the SIS staff.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Attitude

Company Identification:

Principal Product or Service: Educational Services
Type of Organization: State College
SIC Code: 8221
Size of Workforce: 450
Unionized: Yes ☐ No ☒

Project Background:

ITS was referred to this State College by a job developer who had learned of serious manpower shortages and turnover problems being experienced by the institution.

Problems Identified and Recommendations:

The client organization had expanded in recent years putting substantial strain on its business administration functions. Clerical operations formerly accomplished by a single administrator and his immediate staff now required the coordinated efforts of several specialized divisions headed by professional administrators. This expansion also gave new supervisory responsibilities to the senior clerical staff. After interviewing these clericals, it was determined that they were ill-prepared for their supervisory responsibilities, unsure of their job content and unhappy because they wanted greater participation in the decision-making process. ITS suggested a supervisory training course which would permit the senior clerical staff to better perform their jobs, thereby freeing department heads from day to day detail work.

Technical Service Response:

ITS provided a six week, 12-hour course covering basic job functions, responsibilities and possible methods of setting and achieving goals. Also, modules on communications and interpersonal relations were included.

Outcomes:

The training program increased the trainees' self awareness and sensitivity to others needs. However, a follow-up survey revealed that many of the benefits of the program were undone by a hostile reaction to the program by the trainees' managers.

Environment

The lack of a safe, healthy and comfortable physical plant can contribute to manpower problems and reduce the productivity of the workforce. Improving and maintaining a supportive physical environment may have a positive effect on worker behavior and general workforce stability.

The recent Occupational Safety and Health Act, mandating improvements in the quality of the work environment, has forced many companies to review and improve their present physical plant conditions. But beyond mere compliance with the law, the quality of working conditions can have a significant impact on productivity and worker morale. Many workers, particularly those employed by small manufacturing concerns, function in conditions that are at times intolerable. Temperature extremes, poor ventilation, inadequate lighting and excessive noise are only a few of the conditions that abuse the senses and bodies of workers. Indications of the presence of these conditions may include: worker complaints of illness because of environmental conditions; industrial accidents related to hazardous plant situations; and frequent failure to pass state and federal safety inspections. In addition, poor sanitation, inadequate washroom and lounge facilities and poor transportation and parking arrangements may be perceived by employees as an indication that management does not care about them, thereby causing a serious morale problem.

Probable Causes and Responses

In most cases, company managers are well aware of the unsafe, unhealthy and unpleasant conditions in the plant. But unfortunately, in too many cases, the firm is either unwilling or unable to make the necessary capital expenditures for required repairs and improvements. If intolerable plant conditions can be remedied only by a substantial capital inventment, there is little that an ETS program can do beyond bringing the situation to the attention of the appropriate company official, indicating the negative impact it may be having on morale and productivity and suggesting steps to be taken to rectify the situation. If, on the other hand, the unacceptable conditions flow out of an understaffed, poorly trained or ill equipped maintenance and/or sanitation department, it is possible that training in the importance of proper maintenance and sanitation procedures can go far in correcting the environmental conditions.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Environment

Company Identification:

Principal Product or Service: Garden Tools
Type of Organization: Manufacturing
SIC Code: 3423
Size of Workforce: 300
Unionized: Yes ☒ No ☐

Project Background:

The company was contacted through the direct marketing program. The plant supervisor, who had recently come to the company, was concerned about the high turnover (almost 400% per year), excessive scrap and large amounts of overtime which the company was experiencing. The plant manager and employee relations director had formed some preliminary judgments concerning the causes of these problems and welcomed the opportunity for confirmation by an outside organization.

Problems Identified and Recommendations:

SIS conducted a problem analysis and found that the firm had the following unacceptable conditions in the plant:

1. Inadequate lounge and lunchroom facilities;
2. Poor ventilation in the forge shop;
3. Lack of safety clothing;
4. Lack of adequate work tables for handling finished products.

SIS recommended that the company take necessary steps to correct these problems and improve the environment.

Technical Service Response:

None required.

Outcomes:

1. The company quickly improved the lunchroom and lounge facilities for the production workforce.
2. The company has reserved decision on providing safety clothing, improving the ventilation system and acquiring additional work tables.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Environment

Company Identification:

Principal Product or Service: Glass Tableware
Type of Organization: Manufacturing
SIC Code: 3229 Size of Workforce: 4161
Unionized: Yes ☐ No ☐

Project Background:

The company was referred to SIS by the OBES Testing Unit. Management was concerned about low minority group representation in the workforce and was in the process of examining hiring standards, testing procedures and upgrading practices in order to increase the number of black employees. The OBES testing official working with the company felt that the firm's situation might call for a broad examination of its personnel practices and therefore contact SIS to look particularly at promotional and training procedures.

Problems Identified and Recommendations:

Although SIS did not do a formal problem analysis, preliminary examination determined that the company's immediate problems involving recruitment rather than training or promotional practices. The firm is in a suburban area 30 miles from Columbus where there are very few minority group workers available. SIS therefore suggested the possibility of recruiting workers from the center city and providing special transportation to the plant.

Technical Service Response:

Transportation of workers was beyond the mandate of the ES program, but SIS knew of resources available through the Model Cities program and arranged a meeting between officials of that program and company management in an attempt to facilitate an agreement on a recruitment and busing program.

Outcomes:

The agreement between the company and the Model Cities Agency was never executed. The company has a regular workforce reduction from November to April and was forced to lay off a substantial number of workers before the busing program could be started. It is expected that the program will be implemented when hiring begins in April.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Environment

Company Identification:

Principal Product or Service: Cooking Oils
Type of Organization: Manufacturing
SIC Code: 2096 Size of Workforce: 110
Unionized: Yes ☐ No ☐

Project Background:

The company, a medium-sized manufacturer of cooking oils, was contacted through the direct marketing campaign. The firm had recently been acquired by a large food products corporation and had both a new president and a new personnel director. The new president and his management staff were interested in improving the productivity of the entire organization. The personnel director already made a preliminary assessment of the problems and had initiated a safety training program.

Problems Identified and Recommendations:

While SIS was conducting a problem analysis in the plant, they found that a number of unsafe conditions existed including grease and acid coating on stairs, floors and walkways.

Technical Service Response:

None required other than to notify management of the safety hazards.

Outcomes:

1. In order to overcome the unsanitary and unsafe conditions, several additional people were hired to augment the janitorial department.

Structure

Occupational structures, job content, work rules and personnel procedures have evolved in response to the needs of the production process and periodic crisis situations. Often, irrationalities that creep into these structures and become institutionalized can lead to inefficiency, restricted internal mobility for particular workers, low morale and poor management/worker relations.

Every organization develops a process or series of processes which, it is felt, will effectively turn out the product or service. Occupational structures, work rules and manpower management procedures then solidify around these processes. However, in certain situations, rigidities in these structures tend to inhibit rather than assist the organization in reaching its objectives.

It is an unfortunate fact that many American workers are employed in industries with compressed occupational structures offering limited opportunity for meaningful career mobility. Even in organizations with rich occupational structures, movement for certain classes of employees is based not on a rational progression of skill development but on procedures affected by tradition, the vested interests of unions and senior workers and shifts in technology. Changing these structures and procedures is almost impossible without cataclysmic consequences, or so most management and union officials believe.

Probable Causes and Responses

Some of the most common structural problems and their causes are: production delays resulting from heavy a reliance on key workers; skill shortages and civil rights compliance problems caused by unrealistic educational or training requirements; blockages in the workflow related to poor intraplant communication systems; and high turnover among workers bored with their jobs and pressured by production requirements.

Broad structural change most often occurs when industry is faced with extraordinary pressure resulting from critical process problems, major skill needs or civil rights compliance requirements. Because structural change is difficult, managers tend to look to cosmetic or mechanistic responses which appear to reduce manifestations of the problems without eliminating their causes.

An outside technical assistance organization can identify many of these structural problems and their causes. Governmental agencies and private consultants have had some success in changing structures using job task analysis, job restructuring and systems analysis techniques particularly when the firm is under pressure to improve its productivity or to respond to EEOC or OFCC directives regarding discriminatory practices.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Retail Merchandise
Type of Organization: Department Store
SIC Code: 5311 Size of Workforce: 1200
Unionized: Yes ☐ No ☒

Project Background:

The company, a large quality department store contacted SIS at the suggestion of a former employee who had participated in an SIS operated program at her new firm. The department store managers had begun to examine their personnel procedures and promotional practices in order to develop an affirmative action program. They were particulary concerned about the lack of minority group employees in certain occupational groupings and were therefore receptive to SIS offers of assistance.

Probelms Identified and Recommendations:

SIS conducted a problem analysis for the company and found that the minority group representation throughout the occupational structure could be improved by:

1. Developing an active recruiting program rather than depending solely on walk-ins.
2. Creating a new position as a bridge between the sales and buying occupations and training candidates for this new "alternate" position in stores procedures and supervisory skills.
3. Training present buyers and higher level supervisors in human relations and communications skills in order to better enable them to supervise the new "alternates."

Technical Service Response:

1. SIS contacted the ES local office manager and district director of the ES to discuss a special recruiting program for the company. The resulting plan was submitted to the company, and they agreed to see up to 225 ES referrals for entry level jobs.
2. SIS worked with the company to write a job description for the alternate position.
3. SIS developed and conducted a 16-hour training program for the new alternates in supervisory skills and store procedures.
4. SIS conducted the same 16-hour program for a group of 30 assistant buyers, buyers and department managers.

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Type of Organization: Department Store

Outcomes:

1. The store has agreed to hire at least 100 OBES referrals for the entry-level sales position.
2. All 15 trainees in the "alternate" training program were promoted to the new title and given 10% salary increases.
3. Three of the 30 supervisors who received training in supervisory techniques were immediately upgraded to more responsible positions on the basis of their performance in the training sessions.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Flags
Type of Organization: Manufacturing
SIC Code: 2399 Size of Workforce: 300
Unionized: Yes ☒ No ☐

Project Background:

The Defense Contract Administration's Contract Relations Officer advised the company that the N.J. Employment Service could assist them in developing an affirmative action program. The company contacted the ES Director who referred the company to ITS.

Problems Identified and Recommendations:

The company did not have the expertise to analyze jobs, or prepare job descriptions for recruitment and placement purposes in carrying out their affirmative action program. In the course of analyzing jobs and interviewing personnel, ITS found that the company's practice of arbitrarily classifying all workers in a department as Preparatory Workers tended to obscure the differences in skill levels of the jobs. Skill differences involved such requirements as ability to read, interpret and follow job specifications, to work on complex items requiring multiple design applications, to make determinations about procedures based on judgment, and to work with minimal supervision. As a result, the company and union expressed a need for a job classification system and job restructuring.

Technical Service Response:

A job inventory form was designed and used to systematically list all jobs in the company by department and to supply statistical data concerning number of people employed by sex and race in each job. Such information was required to determine categories in which minorities were being underutilized. ITS provided the following services: 1) Reviewed job titles and duties and made conversion to DOT titles where possible; 2) Analyzed jobs and wrote descriptions for all other jobs; 3) Restructured floor worker job into three separate jobs to provide job mobility and promotional opportunities; 4) Developed a form and methodology for classifying jobs in the plant, involving job rating techniques used in the third edition of the *Dictionary of Occupational Titles.*

Outcomes:

1. The occupational materials developed in the study were approved by the contract compliance officer and assisted the company in carrying out its affirmative action program.
2. The restructuring of the Preparatory Worker job into three jobs to establish skill levels and provide upward mobility, and the job classification system involving the DOT rating scheme, were approved by both the company and union and implemented in the organizational structure.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Retail Merchandise
Type of Organization: Discount Department Store Chain
SIC Code: 5311 Size of Workforce: 150
Unionized: Yes ☒ No ☐

Project Background:

The company was referred to SIS by a Cleveland manpower program which had originally contact the firm. The company is a large discount retailer with numerous outlets throughout the midwest. The company had experienced a rapid expansion over the past few years and it was having difficulty recruiting and hiring qualified personnel.

Problems Identified and Recommendations:

SIS met with company management and learned that no formalized job descriptions existed for any of the stores' positions. Consequently, employees often had difficulty determining who was responsible for the various duties and there was little uniformity in like jobs even within the same store. Also, because no job descriptions existed, it was difficult to establish realistic qualifications for prospective employees. SIS recommeded that the OAIS unit of the Employment Service be called in to write job descriptions.

Technical Service Response:

In response to the SIS request, the OAIS staff worked with the store staff to analyze jobs and write job descriptions for the company's 13 most critical positions.

Outcomes:

The company has distributed the 13 standard job descriptions to all their stores and district headquarters in order to:

1. Standardize occupational content throughout the retail operation and;
2. Facilitate recruitment of new personnel by using the descriptions as the basis for standard job orders. These orders were distributed to various local ES offices to assist them in referring qualified applicants to the firm.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Alcoholic Beverages
Type of Organization: Government Owned Retail Sales
SIC Code: 5921 Size of Workforce: 2000
Unionized: Yes ☒ No ☐

Project Background:

The organization was referred to SIS by a manpower service program in Cleveland which was unable to help the client. The Cleveland organization had initiated negotiations and accomplished a problem analysis before their withdrawal from the situation. At the suggestion of the Cleveland program's Director, SIS contacted the organization to determine whether it could be of any assistance. It was learned that the organization was in the process of planning a substantial statewide training effort and would welcome assistance in training program design, and curriculum and training materials development.

Problems Identified and Recommendations:

The organization was in the process of examining its present and future training needs. SIS assisted in this activity by conducting a training needs survey for the organization. From this survey, the following recommendations were offered:

1. That a trainer be appointed for each of the organization's 12 districts.
2. That a standard training curriculum be developed for the statewide organization and that the newly appointed trainers be instructed in the use of this material.
3. That the organization appoint a training director to coordinate the training effort.

Technical Service Response:

1. SIS developed, tested and packaged a standard training program for the organization. In testing the program SIS trained a number of clerks, assistant store managers and store managers.
2. SIS provided 40-hours of training for the 12 newly appointed trainers in the use of the training materials and in the fundamentals of training techniques.

Outcomes:

1. The organization created and filled 12 new trainer positions. These employees will provide training for the entire retail operation.
2. A training director was appointed by the organization to coordinate the training activities throughout the state.
3. The training program designed by SIS will be implemented by the organization throughout the state on a continuous basis.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Medical Services
Type of Organization: Hospital
SIC Code: 8061 Size of Workforce: 587
Unionized: Yes ☒ No ☐

Project Background:

In the course of a follow-up study of two upgrading programs conducted by ITS at the hospital, the nursing director requested assistance in restructuring nursing jobs to establish a new job called obstetrical technician. Discussions revealed that training was in progress to upgrade five nurse aides to the newly created job of obstetrical technician. The nursing director expressed concern for complete success in the program because the job was created in a very informal manner, without applying job restructuring techniques. The training in progress for the new job consisted of skill training only; because of the close contact the obstetrical technicians have with the clinic patients, it was felt that human relations training was also needed.

Problems Identified and Recommendations:

The hospital was experiencing a critical shortage of registered nurses. The objective of the job restructuring was to alleviate the shortage while providing greater job mobility among the low-skill workers. However, the occupational information obtained by the nursing director in attempting to create the job of obstetrical technician was sketchy and incomplete, without regard for standard job restructuring techniques. Technical assistance involving formal job analysis and job restructuring techniques was recommended to formalize the program and implement it on a firm basis within the existing organizational structure. In addition, ITS offered to conduct human relations training for the trainees in the obstetrical technician program.

Technical Service Response:

The ITS analyst obtained pertinent information about the hospital and the organizational structure of the nursing department and the obstetrical unit through interviews with administrative personnel and observation of the facilities. A study of the jobs of the obstetrics nurse aide and nurse positions was made and a job restructuring work chart was prepared. The study revealed the need for two full-time jobs, resulting in the structuring of an obstetrical technical (nursery) and obstetrical technician (delivery room and clinic). In addition, ITS conducted six two-hour sessions in human relations to prepare the trainees for the interpersonal aspects of their work.

Outcomes:

1. The two new obstetrical technician jobs, in the nursery and the delivery room and clinic, were instituted as new classifications.

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Type of Organization: Hospital

This provided promotional opportunities for workers in the previously dead-end job of nurse aide. It also gave upgraded workers exposure to tasks of higher level jobs and incentive to enter training for licensed nursing jobs.

2. According to the nursing director, the human relations training conducted by ITS for the trainees served to create a better understanding of the needs of people and improved their ability to relate to hospital personnel as well as patients.
3. A follow-up study revealed that three of the five trainees were still employed as obstetrical technicians, one applied and was accepted in an approved nurse training course, and one was laterally transferred to a job in central supply within 1½ years after training.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Cooking Oils
Type of Organization: Manufacturing
SIC Code: 2096
Size of Workforce: 110
Unionized: Yes ☒ No ☐

Project Background:

The company, a medium-sized manufacturer of cooking oils, was contacted during the direct marketing campaign. The firm had recently been acquired by a large food products corporation and had both a new president and new personnel director. The new president and his management staff were interested in improving the productivity of the entire organization. They were particularly interested in improving the maintenance program since the equipment was old and subject to frequent breakdown, and capital expenditures could not be made immediately. The personnel director had already made a preliminary assessment of the problems and had initiated a safety training program. He was also looking at commercially available supervisory training programs.

Problems Identified and Recommendations:

SIS conducted a problem analysis and found: 1) that the company had no preventative maintenance program and 2) that there was no job progression structure in the maintenance department. Although three job classifications existed in the department, there were no workers in the top classification and very few in the second. Also, there was no bridge from operating positions to maintenance positions. SIS recommended that job descriptions for each of the three classifications be written and that promotions be made to the top rated jobs where appropriate. They also recommended the establishment of a preventative maintenance program.

Technical Service Response:

SIS inventoried the skills of the entire maintenance staff.

Outcomes:

1. The skill inventory revealed that three members of the maintenance staff were far more skilled than the rest of the crew. On this basis, the three men were promoted to the next higher grade and given a salary increase.
2. In order to create a more balanced maintenance staff and to create a bridge between the operations and maintenance department career structures, three additional job classifications (trainee, helper 1 and helper 2) were created for the maintenance career progression.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Health Services
Type of Organization: Women's Hospital
SIC Code: 8069 Size of Workforce: 400
Unionized: Yes ☒ No ☐

Project Background:

The hospital was approached through direct marketing techniques based on a comment from an employee of another institution that the hospital was in the process of expanding and had a history of difficulty in recruiting qualified help. The hospital had seldom used ES in the past. Most employees were recruited trhough walk-ins and employee referrals, but the hospital was receptive to job development contacts. The initial contact was with the hospital administrator who identified the dietary department as an area troubled by turnover and one which would need to increase productivity when new build wing containing 90 beds was opened. A problem analysis was performed to identify specific problems.

Problems Identified and Recommendations:

While observing the non-cooking workflow in the hospital's kitchen, the SIS analysis team identified process problems that resulted from a lack of clear lines of authority between workers and supervisors, undefined job requirements, and the absence of career progressions. In response to these problems, SIS recommended that the non-cooking work of the dietary department be organized into four functional areas and that a lead worker position be created in each area. Thus, a career progression which had not previously existed, was established. Further, in defining the tasks and responsibilities of the lead-worker, certain inefficiencies in the workflow (such as cooks washing pots because ware/washers refused to do so) were corrected by assigning these tasks to the new unit leaders.

Technical Service Response:

The OAIS unit was called in to write job descriptions for all kitchen occupations.

Outcomes:

1. The hospital created the new lead positions as recommended.
2. Inefficiencies in the workflow appeared to be corrected.
3. Non-cooking processes were reorganized in accordance with SIS recommendations.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Printing and Other Office Services
Type of Organization: Division of State Government Agency
SIC Code: 7361 Size of Workforce:
Unionized: Yes ☒ No ☐

Project Background:

The Director of the office services division of a public agency learned of the analytical capabilities of the program through an informal contact with the SIS director. Since the Office Services Director was new to the division, he felt that problem analysis by an outside agency would be valuable. He indicated that the division had been having some difficulty in meeting schedules and maintaining quality standards but he had not yet been able to pinpoint the most significant problems.

Problems Identified and Recommendations:

The SIS staff conducted a problem analysis in the printing, duplicating and mailroom departments of the office service division by interviewing 11 workers from each department. The analysis revealed that:

1. Because workers in the printing department were able to operate only one or two machines, any absenteeism caused critical delays. SIS recommended cross-training for printing crew on all printing equipment.
2. Poor work scheduling procedures throughout the division were resulting in unequal workloads for staff members. SIS recommended that the Director of the division review and modify scheduling procedures both to equalize work loads and to improve the division's performance in meeting deadlines.
3. The printing and mailroom department supervisors were having difficulty managing their operations. SIS recommended that they both be replaced by supervisors better able to handle a young staff.
4. Mail deliveries were being delayed because of an understaffed messenger crew. SIS recommended that at least one additional messenger be hired.

Technical Assistance Response:

None

Outcomes:

1. The two inadequate supervisors were transferred to other agency divisions. None of the other recommendations concerning cross-training or new scheduling procedures have yet been implemented.

Program Conducted By: SIS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

ompany Identification:

Principal Product or Service: Refrigeration Equipment Repair
Type of Organization: Industry Association
SIC Code: 7623 Size of Workforce:
Unionized: Yes ☐ No ☒

Project Background:

A member firm of the client Association was contacted through the direct marketing program. During the preliminary discussions with that company's president, it was learned that the refrigeration equipment service industry in the Columbus area had been unable to recruit adequately trained servicement. Although the company was willing to train new employees, the informal training program required approximately four years to produce a competant repairman. The industry had tried to work out a training program with the Columbus MDTA Skills Center but had been dissatisfied with the results. Industry officials felt that a battery of tests which would identify those people with an aptitide for repair work would be very helpful.

Problems Identified and Recommendations:

The problem of selecting new employees with an aptitude for the repairman job had been identified by the Association. SIS recommended that the Employment Service testing unit be called in to develop a Specific Aptitude Test Battery (SATB) for the job.

Technical Service Response:

SIS worked with the testing unit to develop the test battery.

Outcomes:

1. The members of the Association have placed several orders with the ES for trained and untrained personnel and requested that they be tested using the SATB.

Program Conducted By: ITS

PROBLEM/RESPONSE ABSTRACT

Problem Classification: Structure

Company Identification:

Principal Product or Service: Plastic Products
Type of Organization: Manufacturing
SIC Code: 3079 Size of Workforce: 90
Unionized: Yes ☐ No ☒

Project Background:

This assignment emanated from a request to ITS from the manager of the Newark ES Job Bank. Previously, the company had been visited by an employer relations representative who discussed technical services offered to employers. Subsequent meetings between ITS occupational analysts and the newly assigned personnel manager revealed that the company had grown to the point where it needed guidance in establishing formal personnel procedures. The personnel functions were being assumed by a former sales representative who had no experience in the field.

Problems Identified and Recommendations:

The company had engaged a management consultant to establish personnel policies. However, the company could not financially afford to have the consultant analyze jobs and prepare detailed job descriptions for use in recruitment and selection, wage reviews, determining lines of promotion and authority, and other personnel functions. The company management's most pressing concern was developing a wage and salary classification system. In order to conduct periodic wage reviews, position descriptions would have to be developed to reflect realistic functions and responsibilities for comparison with the same jobs in other companies in the area. Job titles would also have to be standardized for survey purposes.

Technical Service Response:

A tour of the plant was made, operations were observed and an inventory of the company's exempt personnel was prepared. Interviews were conducted with all exempt personnel and the following materials were completed:

1. A job inventory to include company titles and conversions to titles in the *Dictionary of Occupational Titles*;
2. Company organization charts;
3. Job analysis schedules including identifying information, job summary, work performed, education, training and experience required, relation to other jobs, machines, tools, equipment and work aids required, and details of physical activites and working conditions.

Outcomes:

1. As a result of the study, standard job titles were assigned, specific functions and responsibilities of jobs were agreed on by incumbents and superiors, job summaries were prepared for use in a wage survey, and a wage review program was established.
2. The job inventory, organization charts and detailed job analysis schedules served to formalize the organizational structure and are now being utilized in personnel functions.

APPENDIX I — JOB ANALYSIS

JOB ANALYSIS

Job analysis is a method by which the elements of a job can be identified, analyzed and modified for a variety of purposes including training program development, job restructuring, occupational analysis and career ladder design. Job analysis "involves a detailed analysis of each job in terms of: (1) the specific tasks performed by the worker; (2) the functioning of the worker in relation to data, people and things; (3) the minimum general educational development required for satisfactory performance; (4) an estimation of the aptitudes required for satisfactory job performance; and (5) an assessment of significant worker trait requirements, such as physical strength, temperaments and interests."*

The techniques of job analysis were developed by the United States Employment Service and most State Employment Services have established a special unit to undertake the analysis of jobs. While employment interviewers in the ES system rely on the principles of job analysis in writing job orders and assessing applicant experiences, detailed job analysis is generally done by the specially trained members of an Occupational Analysis unit. Job analyses are basic for supplying occupational information needed for manpower development and utilization programs in industry and other non-governmental establishments. The *Handbook for Analyzing Jobs* outlines the major uses for job analysis as follows:

- *Recruitment and Placement.* Providing meaningful and correct job data for the recruitment and selection of workers.
- *Better Utilization of Workers.* Determining job relationships useful in the transfer and promotion of workers to facilitate opening up job opportunities at the entry level. Determining actual physical demands of the job and suggesting job adjustments to facilitate improved utilization of handicapped workers.

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* *A Handbook for Job Restructuring*, U.S. Department of Labor, Manpower Administration, Washington, D.C., 1970, pg. 1.

- *Job Restructuring.* Restructuring jobs to make better use of the available work force; and to assist in opening entry job opportunities for the less than fully qualified, in facilitating the placement of workers in hard to fill jobs, and in providing trainee jobs.

- *Vocational Counseling.* Furnishing the vocational counselor with an assessment of the tasks and requirements of jobs and of the avocations, training, and experiences that lead to them, as a basis for vocational counseling.

- *Training.* Determining training needs and developing training programs. The content of the training curriculum, the amount of time required for training, and the basis for the selection of trainees are dependent, in part, upon knowledge of the jobs.

- *Performance Evaluation.* Providing an objective basis for developing performance standards.

- *Plant Safety.* Improving plant safety through the disclosure of job hazards.*

A comprehensive Employer Technical Services program uses the techniques of job analysis in much the same way as other Employment Service units. For example, if it is suspected that a company has an irrational occupational structure, job analysis techniques may be used in a study aimed at developing a structure more supportive of overall plant operations. In the event that a firm's problem is localized in one particular job classification -- perhaps indicated by persistent skill shortages -- job analysis might be used to test the validity of the occupational requirements, or to develop more precise job descriptions for use in recruitment. If the problem relates to a poorly trained staff, job task analysis (a more detailed form of job analysis) can be used to identify elements and tasks in the job, which will assist in the development of behavioral objectives required for training program design and curriculum development. Finally, job analysis is used to point out inconsistencies in job content, thereby providing the foundation for restructuring the job. Job restructuring can alleviate skill shortages, create new career paths or provide new job classifications.

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* *Handbook for Analyzing Jobs*, U.S. Department of Labor, Manpower Administration, Washington, D.C., 1972, pg. 1.

The Job Analysis Procedure

The job analysis process involves observing workers performing their jobs and interviewing workers, supervisors and others who have information pertinent to the job. The procedure requires that an analyst observe the worker performing a complete work cycle before asking any questions. Then all persons connected with the job are interviewed to obtain a full understanding of the tasks involved and their relationship to the production process and plant environment. Additional information can be gleaned from company job descriptions, information provided by industrial and professional organizations, or analyses done on similar jobs in other facilities. Once the data is collected, the job under study is disassembled into its component tasks, and then arranged in a logical order. Outlined below are the various units into which a job may be logically divided as explained in the *Industrial Services Handbook.**

1. Element: This is the smallest step which subdivides work activity without analyzing separate motions or mental processes.

2. Task: This is a collection of one or more elements which constitute a major activity performed by the worker. It is the work unit that deals with the methods, procedures, and techniques by which parts of a job are carried out. A task is created whenever human effort, either mental or physical, is exerted. In order to be recognized as a task, certain conditions must exist. Tasks must constitute one of the worker's principal responsibilities; occupy a significant portion of time; utilize skills, knowledges, and abilities; and be performed for some purpose, according to some standard with respect to speed, accuracy, quality or quantity.

3. Position: This is an accumulation of tasks and related responsibilities requiring the services of an individual.

4. Job: This is a group of positions that are identical with respect to their major or significant tasks.

After the job has been decomposed into its tasks, the analyst then arranges the tasks into a logical order. Although the tasks within various jobs differ in content, most fall into a specific pattern which defines the operational flow of the production process. Thus, when doing job analysis, the order or sequence of operations is important and must be analyzed. The three major job groupings are:

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* *Industrial Services Handbook*, U.S. Department of Labor, Manpower Administration, United States Training and Employment Service, Washington, D.C., 1970.

- Chronological Operations: The worker performs a specific cycle or sequence of operations and they must be analyzed from the first step performed through each successive step.
- Functional Operations: The worker has no regular cycle of operation, but instead has a number of functions which can be carried out in any order. The data gathered should be organized according to function and then grouped under headings which explain the processes that are occurring.
- Overlapping Operations: In this type of job the worker alternates between chronological routines and functional operations. The data which is collected and processed for job analysis must consider the relationship of the worker to data, people and things and the peculiar traits of the worker described in terms of training, aptitudes, temperments interests and physical demands.

Job Restructuring

Job analysis studies often point out irrationalities in the content and structure of jobs within an organization and provide the foundation on which job restructuring can be based. Job restructuring is the rearrangement of tasks into a new structure so that the total production process runs more smoothly.

There is growing interest in the use of job restructuring to relieve many internal labor market problems. An Employer Technical Services program may find it necessary to undertake a detailed analysis of the jobs in a plant when it is suspected that the job content or occupational structure is inhibiting efficient production. For example, if the employer is faced with a persistent shortage of skilled workers, it may be advisable to readjust present jobs to facilitate better utilization of both skilled and unskilled manpower. In this instance, restructuring may result in fractionalizing complicated jobs so that less skilled or less educated workers can be utilized. Job restructuring has also been suggested as a cure for worker dissatisfaction and alienation. Many progressive managers have begun to review and revise the contents of jobs and the career paths and promotional patterns in their firms in order to provide the workers with increased job satisfaction.

Dead-end or boring jobs can be redesigned and refitted into an upward mobility system. Advancement opportunities can be created which reward workers for extensive skill, knowledge or training acquired on the job or in an educational setting. If a firm is faced with frequent work stoppages because production relies too heavily on key workers, jobs may be restructured to distribute responsibility more evenly throughout the occupational structure. Often when jobs are restructured, additional training is needed to enable workers to effectively satisfy new job requirements.

Job restructuring involves a special application of job analysis techniques. The first step requires an analysis of a job as it relates to the entire production process in a plant. Each job is reduced to its component tasks and these tasks are rearranged to create new or better organized jobs. Basic to the job restructuring concept is an understanding that each job in a system is not an independent entity; it exists in relation to other jobs. When job restructuring is undertaken, it is expected that the entire production system will operate more evenly, that more desirable relationships will be created between one job and another, that there will be maximum use of skilled and experienced workers, and that the productivity will be increased by creating a more rational operational system.

Figure 1 is a flow chart of the job restructuring process used by the Employment Service.

Figure 1

FLOW CHART

JOB RESTRUCTURING

(Job Modification)

ANALYZE JOB - Watch; Ask

WHAT Worker Does - WHAT Gets Done

Machinery, tools, equipment, work aids, materials, products, subject matter, and services involved in the doing.

COMPARE TASK IMPORTANCE

Identify and describe tasks

Express relative complexity of tasks
(1 - Least difficult; 2 - Intermediate; 3 - Most difficult)

Determine percentage of time spent on each task

RESTRUCTURE JOB

Isolate highest skilled or more complex tasks
Set up job to match qualified worker and demanding tasks
Create new jobs - use less skilled worker for jobs with tasks of less complexity; provide sequential ladders of progression from lowest to highest job, and integrate progression with training support.

JOB RESTRUCTURING EXAMPLE

REGISTERED NURSE

Now freed for optimum attention to professioanl nursing tasks.
Routine nursing duties assigned to nurse learner and/or nurse's aide.
Routine surgical chores to Surgical Technician.
Routine clerical duties to Ward Clerk.

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* *Industrial Services Handbook*, U.S. Department of Labor, U.S. Department of Labor, Manpower Administration, United States Training and Employment Service, Washington, D.C., 1970, p. 12.

APPENDIX II — TRAINING PROGRAM DESIGN

TRAINING PROGRAM DESIGN

Overview

Training in industry is undertaken to promote a high level of employee performance on the job. Formal training plays a large role in company policy when management finds it difficult to hire qualified workers who possess the skills and attitudes required by the organization. Training in industry has generally been concerned with the teaching of manual and technical skills for production workers, but over the past 25 years, training approaches have been used for the more subtle skills required by supervisors, managers and other decision makers. Currently, a substantial portion of many corporate training budgets is dedicated to communications, sensitivity and problem-solving training for the non-production workforce. Also, training has become an important device for improving worker morale and increasing employee feelings of participation in the work of the organization.

Industrial training is intended to inform the worker of what is expected of him and then to provide him with the values, skills and attitudes required by the work situation. To be effective, training must be relevant to the trainee's particular job.

Training needs can be identified by assessing the relationship between an individual's actual and expected performance within the context of the work setting. Where discrepancies between expectations and performance are uncovered, training is often the appropriate mechanism for narrowing this gap.* In order to accomplish effective training, the goals of the training must be carefully defined. First, a description of the proposed change in the learner -- a careful statement of what the worker should be able to do, or how he should respond to a defined set of stimuli -- must be prepared. This involves 1) an assessment of his behavior prior to training -- what he is presently able to do, and how he is likely to react; and 2) a description of terminal behavior -- what the trainee will be able to demonstrate once training is completed. Finally, there must be some criterion, either a standard or test, by which terminal behavior or the results of training can be evaluated.

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* It should be pointed out that other approaches, such as changes in process, work rules or job restructuring, also have the potential for aligning expectations with performance.

After the training objectives have been identified, several steps are required to complete the training program. Training program procedures, content, methods and material relevant to the stated objectives must be selected; the trainee must then be exposed to the selected material in accordance with the principles of learning; the trainee's performance must be periodically monitored so that he can adjust his behavior to meet the objectives of the training course. And the trainer must evaluate the trainee's terminal performance according to the originally stated training objectives or goals, before releasing the learner from the training experience.

The discussion which follows is divided into the following three units:

-- Curriculum Development: An outline of the steps required in analyzing training needs, developing a curriculum and selecting training materials.

-- Training Process: A description of the steps involved in providing a trainee with the requisite skills and knowledge.

-- Training Approaches: A brief discussion of the principal training procedures used by business organizations.

An extensive bibliography of books, reports and manuals which contain detailed information on the various aspects of training is included at the end of this manual.

Curriculum Development

A curriculum is a guide for the trainer on what must be taught and an indication to the trainee of what must be learned. The first and most important step in the development of curriculum is to define the behavioral objectives. A training objective stated in behavioral terms is a concise statement of the skill, behavioral change or the specific kind of performance which is required at the end of the training. The behavioral objectives are determined by analyzing the tasks involved in the target job. This analytical process is accomplished by observing, analyzing and describing the behavior of a number of workers presently performing the job and then outlining the various tasks they perform. Care must be taken in this process to identify only those tasks specifically related to the job; all extraneous processes must be deleted. Once the necessary behavior has been defined and validated, it must be stated in behavioral terms. For example, one objective in training a worker to operate a certain machine might be, "The trainee will be able to state the six-step set-up procedure for a Bridgeport high speed drill press." In writing objectives, verbs which have alternative interpretations should not be used. For example, to *know*, to *understand*, to *enjoy* and to *appreciate* all have several levels of meaning. However, to write, to recite, to list or to differentiate are specific activities with limited interpretation.

After the objectives have been defined, an outline of the curriculum should be prepared. A written curriculum outline insures that all training will be provided in a comprehensive and uniform manner. A written document also provides production managers with an opportunity to check the validity of the material. The curriculum outline reflects the nature of the behavior to be learned and the personality and capabilities of the trainer. Trainers with comprehensive knowledge of the target job may require little more than a sketchy outline highlighting the key areas to be covered. In those situations where the trainer lacks broad experience in the skill areas to be trained, and is relying on the data provided by a job task analysis, a detailed curriculum outline is generally prepared which identifies training materials to be used. The basic steps involved in curriculum design include:

-- Doing a job task analysis to provide a detailed description of each task or aspect of a job;

-- Writing objectives for the training in behavioral terms, (e.g., "The trainee will be able to operate a high speed offset press.");

-- Creating a pre/post test to be administered before the training begins and again at the end of the course to measure the learning that has taken place;

-- Developing a curriculum outline based on detailed task analysis of the target jobs;

-- Writing full curriculum statements and developing training materials (including illustrations, reading materials, tests, etc.);

-- Testing the curriculum on a group similar to those who will receive the training and making revisions based on that experience.

The Training Process

The instructional process can be separated into four parts: preparing the worker, demonstrating the process, prompting the worker and evaluating the performance. Although different training authorities have different names for the phases, the general processes involved in them are the same*:

- *Preparing the Worker:* The first step is to make the trainee feel at ease before he receives the instruction. A friendly and easy attitude is the best approach. The next step is to state the task to be learned in a clear-cut and definite way -- "What we are going to learn is..." is a good introduction to this statement. Once this is accomplished, it is necessary to find out what he knows about the job. Questions should be specific enough to permit the trainee to answer properly. The trainer should then discuss the important and interesting aspects of the job, in order to "turn-on" the trainee so he will reach out for information rather than merely sit back and listen. Finally, the trainee should be placed in a proper position so he can clearly see the material being presented or the procedure being demonstrated.
- *Demonstrating the Process*: The instructor should first describe the operation exactly as the trainee will be expected to do it. Once the process has been described, the next step is to demonstrate the proper procedures. The instructor should not only demonstrate, but verbally describe what he is doing and why it is being done. Each important step should be covered and key points stressed. Here, visual aids providing illustrations of a particular part of the process can be a useful tool. Care must be taken during this process to instruct clearly, completely and patiently. No matter how slowly learning takes place, the instructor should not lose his composure. In addition, the material should be presented at a pace that the trainee can master. If the process is complex, it should be broken down into manageable parts. Each trainee will absorb the material at different rates and the trainer must adjust the presentation to individual differences to avoid burying or boring the worker. Finally, after the entire process has been demonstrated and the trainee has apparently assimilated the material, the operation should

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* The material for this section is drawn from the analysis presented in *Training and Development Handbook*, American Society for Training and Development. Robert C. Craig and Lester R. Bittel, eds., McGraw-Hill Book Company, New York, New York, 1967, pages 117-120.

be summarized in a final demonstration by the trainer, repeating key points again and stressing the importance of the process.

- *Prompting the Worker*: In this phase the trainee is asked to perform the task just demonstrated, repeating the process until mastery is achieved. This is intended to develop habit patterns which will permit the trainee to carryout the task exactly as it was taught. The instructor must be available to prompt the worker if something begins to go wrong. Once again, the instructor should remain calm and friendly, especially if the trainee is having some difficulty. When the trainee feels comfortable with the work, the instructor should ask him to explain what and how it is being done. If the explanation is satisfactory, the instructor should make sure the trainee understands, by asking him specific and pointed questions -- What would happen if...? What do you do next...? The prompting should continue until both the trainer and trainee agree that the material has been assimilated.

- *Release and Evaluation*: When both the trainer and the trainee agree that the process has been completely learned, the trainee should be left on his own to carry out the job. This provides a breathing spell during which the trainee can familiarize himself with the job and his surroundings. Even if the trainer has no reason for leaving the trainee alone, he should do so for at least one or two complete cycles of the process. If desired, a skilled worker might be designated to provide the trainee with help if it is needed. Questions about minute parts of the process should be encouraged to clear up any minor points which might be troubling the trainee. The trainer should return periodically to evaluate the worker's performance. These evaluations should continue until the worker demonstrates an acceptable grasp of the job.

Training Methods

Business organizations use a number of different training methods. The decision on which procedure to use is determined by the nature of the production process, the availability of resources and the abilities of the training staff. The most commonly used training methods include on-the-job training, formal classroom instruction and self administered training.

- *On-the-Job Training* (OJT): This is the most frequently used method of industrial training. In acquiring the required skills through the OJT process, the trainee uses the tools, equipment and materials involved in actual production. The trainee learns in the production situation and is able to interact with co-workers and supervisors in the actual plant or office. Because the learner is not removed from the production flow, he contributes to the output of the organization, thereby reducing the cost of the training. On-the-job training can be formally structured, with trainers on hand to guide the new worker in learning the process, or informally administered through a buddy system, in which co-workers carry the bulk of the training load. While structured OJT is more expensive than the informal method, the outcome is generally high quality training which results in minimal production losses due to error.

- *Classroom Training*: Classroom training is the most effective way of achieving the attitudinal and behavioral changes required in training supervisory and management personnel. In planning classroom instruction, the trainer must be careful to incorporate mechanisms to facilitate the transfer of learning to the actual work situation. From the beginning, the trainee must be convinced that the concepts and theories presented will help him in the day to day performance of his job. Since classroom training is removed from the actual production situation, the evaluation of training effectiveness is critically important in determining the validity and usefulness of the training effort.

  Classroom training, may be provided in conjunction with on-the-job training when teaching the non-manual, softer skills such as communications, attitudes and human relations. Overall, however, managers tend to rely primarily on OJT, believing that the expense of off-line training programs, in terms of lost production time, outweighs the benefits of classroom instruction. The particular methods used in classroom training are heavily influenced by the educational background of the trainees, the subject matter to be taught and the creativity of the trainer designing the training curriculum. With a little ingenuity, a classroom training program can be created using a variety of techniques such as lectures, group discussions, role playing, problem solving exercises, etc. Varying the training techniques makes the training more interesting and effective. Outlined below are some of the more frequently used classroom training techniques. More information on these procedures may be obtained from the sources mentioned in the Bibliography.

-- Lecture: The lecture method, a fast, effective way to present material, is most efficient when there are a large number of trainees and the material to be presented is factual, descriptive or explanatory.

-- Discussion Groups: This method, frequently used to reinforce ideas presented during a lecture, draws on the knowledge and experience of the trainees. Usually guided by a leader (the instructor), the trainees are encouraged to think creatively about problems, concepts and principles. Group discussions are successful when there is a high degree of interaction and participation among the trainees.

-- Role Playing: This technique is used extensively because it provides a means for presenting a standard situation to all trainees, and results in a high degree of trainee interest because of the personal involvement. "The trainees in a group are presented with a real or hypothetical situation. They then place themselves in the roles involved and act out the situation. The enactment of situations, spontaneity, experimentation, practice, feedback, and analysis are the key ingredients of the technique."* Role playing encourages the understanding that there are multiple solutions to problems, rather than the "best" solution by the instructor; and make it possible for participants to practice skills in a non-threatening environment.

- *Self-Instructional Training*: Individual study can cover a wide range of subjects, from simple reading and writing courses to highly specialized technical and scientific material. The advantages of individual study are that learning occurs at the trainees' own pace and that the material can be geared to fit personal needs.

Although newer and more advanced self-instructional techniques are now in vogue, the most common is still the correspondence course in which training is generally accomplished away from the worksite, in spare time, and relies on written communication between the trainer and trainee. It allows the trainee to progress at his own learning rate and according to his own needs and capabilities. Companies with widespread operations have effectively used correspondence courses to reach employees who are geographically dispersed.

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* Malcolm E. Shaw, "Role Playing," in Craig and Bittel, eds., *Training and Development Handbook*, McGraw-Hill Book Company, New York, 1967, pp. 206-212.

The newest and most highly sophisticated form of self-instructional training is programmed learning, coupled with the use of teaching machines. There are two basic designs to programmed material: branching (the intrinsic method) and linear (the extrinsic method).

-- Branching: After having reviewed training material, the trainee is asked to answer a number of questions. If he gives the requisite number of correct responses, he progresses to the next unit. However, if he gives a wrong answer, he must branch to additional material on the subject before progressing to the next unit of the program.

-- Linear Method: The steps in the instruction follow in a straight line and never deviate from a rigid progression. At each step the student must either supply the appropriate response or return and reread the material--repeating this process until the responses are perfect.

Today, programmed instruction is used to teach many subjects and can be developed in forms acceptable for independent study, teaching machines or conventional classroom instruction.

Teaching machines, audio-visual cassette players, closed circuit television, computer assisted training, and many other new and innovative programs are being incorporated into self-instructional packages. While the machines and materials are both costly and complicated, educators and trainers expect substantial benefits through these self-instructional techniques in the future.

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American Institute of Industrial Engineers
345 East 47th Street
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American Management Association
135 West 50th Street
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American Society for Training and Development
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845 Third Avenue
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Council for International Progress in Management U.S.A., Inc.
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Educational Media Council
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McGraw-Hill Book Company
1221 Avenue of the Americas
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National Association of Manufacturers
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National Council of Industrial Management Clubs

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24 Rope Ferry Road
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National Home Study Council
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The National Management Association
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